DRAFT AIR POLLUTION CONTROL CONSTRUCTION PERMIT AND OPERATION PERMIT

EI FACILITY NO: 617056660 PERMIT NO.: 04-SJZ-142, 04-SJZ-142-OP, 617056660-P01

TYPE: Part 70

In compliance with the provisions of Chapter 285, Wis. Stats., and Chapters NR 400 to NR 499, Wis. Adm. Code,

Name of Source: 3M Menomonie Optical Systems Division

Street Address: 1425 Stokke Parkway,
Menomonie, Dunn County, Wisconsin

Responsible Official, & Title: James M. McSweeney, Plant Manager

is authorized to operate in conformity with the conditions herein.

THIS OPERATION PERMIT EXPIRES Date will be inserted at the time of issuance.

Construction permit (04-SJZ-142) will expire the same day the operation permit (617056660-P01) expires or when the operation permit is issued for the emission units included in this construction permit, whichever comes first.

Renewal application must be submitted at least 6 months, but not more than 12 months, prior to the expiration date of the operation permit [s. NR 407.09(1)(b)1., Wis. Adm. Code].

This source may not operate after this operation permit expires unless the permittee has submitted a timely and complete application for renewal of this operation permit. If the permittee submit a timely and complete application for renewal, the existing operation permit will not expire until the renewal application has been finally acted upon by DNR. [s. 227.51, s. 285.66(3), Wis. Stats. and NR 407.04(2), Wis. Adm. Code].

This authorization requires compliance by the permit holder with the emission limitations, monitoring requirements and other terms and conditions set forth in Parts I, II, and III hereof.

Dated at Wisconsin Rapids, Wisconsin _____

STATE OF WISCONSIN
DEPARTMENT OF NATURAL RESOURCES
For the Secretary

By **DRAFT**
Joseph E. Ancel
Air Team Supervisor

PREAMBLE

An Asterisk (*) throughout this document denotes legal authority, limitations and conditions which are not federally enforceable.

Concurrent Permit Actions Performed as Part of the Review and Issuance of Permit 617056660-P01.
Construction Permits Issued in Conjunction with Permit 617056660-P01 Under s. 285.61(8), Wis. Stats.:

04-SJZ-142

Revised Construction Permits Issued in Conjunction with Permit 617056660-P01 Under s. NR 406.11, Wis. Adm. Code:

None

Operation (CONOP) Permits Issued in Conjunction with Permit 617056660-P01 Under s. 285.62(7)(b), Wis. Stats.:

95-MMH-616-R1-OP, 03-JAJ-055-OP, 04-SJZ-142-OP

Revised Operation Permits Issued in Conjunction with Permit 617056660-P01 Under ss. NR 407.11, 407.12, 407.13 and/or 407.14, Wis. Adm. Code:

None

The following permits, orders, etc., are adopted, under ss. 285.65(3), Wis. Stats., NR 406.11(1)(c) and (d), NR 407.09(2)(d) and NR 407.15(3) and (4), Wis. Adm. Code, by Permit 617056660-P01 which then becomes the primary enforceable document:

NS-79-17-110
MIA-10-KJC-83-17-023
89-TEW-616
94-MMH-610
94-MMH-611
95-MMH-601
95-MMH-607
95-MMH-616
95-MMH-616-R1
95-MMH-616-R1-OP
96-MMH-607
97-MMH-605
00-JAS-606
01-JAS-609
01-JAS-630
03-JAJ-054
03-JAJ-055
03-JAJ-055-OP
03-JAJ-105
03-JAJ-240
04-SJZ-142
04-SJZ-145-EXM

Stack and Process Index.

1. Process P01, Stack(s) S01 — Boiler - 21 million BTU/hr Kewaunee Boiler-Installed 1996
2. Process P02, Stack(s) S02 — Kewaunee 13.3 Million BTU/hr Boiler-Installed 1974
3. Process P03, Stack(s) S03 — Cleaver Brooks 16.7 Million BTU/hr Boiler-Installed 1980

4. Process P04, Stack(s) S04 — ABCO Fire-tube 10.5 Million BTU/hr Boiler-Installed 1989
5. Process P05, Stack(s) S05 — ABCO Fire-tube 10.5 Million BTU/hr Boiler-Installed 1989
6. Process P06, Stack(s) S06, S36 — MRC 5-Installed 2003
7. Process P07, Stack(s) S07, S22, S24, S49 — Tape Coating-Installed 1983
8. Process P08, Stack(s) S08, S34, S35, Control Device(s) C03, C04 — Chrome Plating Process #2-Installed 2003
9. Process P09, Stack(s) S09, Control Device(s) C01 — Automated Spray Coating Line-Installed 1996
10. Process P10, Stack(s) S10, S20 — MRC-1 Coating Line-Last Modified 2000
11. Process P11, Stack(s) S11, S21 — MRC-2 Coating Line-Last Modified 2000
12. Process P12, Stack(s) S12 — MRC-3 Coating Line-Last Modified 2000
13. Process P13, Stack(s) S13, S23 — MRC-4 Coating Line-Last Modified 2000
14. Process P14, Stack(s) S14, Control Device(s) C02 — Chrome Plating Process-Installed 1996
15. Process P15, Stack(s) S15, S25, S43, S44, S45, Control Device(s) C05 — CF1 Ceramic Fiber Making Process-Last Modified 2004
16. Process P16, Stack(s) S16, S26, S43, S44, S46, Control Device(s) C05 — CF2 Ceramic Fiber Making Process-Last Modified 2004
17. Process P17, Stack(s) S17, S27, S30 — CF3 Ceramic Fiber Making Process-Last Modified 2004
18. Process P18, Stack(s) S18, S28 — CF4 Ceramic Fiber Making Process-Last Modified 2004
19. Process P19, Stack(s) S19, S29, S30, S43, S47, Control Device(s) C05 — CF5 Ceramic Fiber Making Process-Last Modified 2004
20. Process P20, Stack(s) S31, S32, S33 — Gamma Line-Installed 2004
21. Process P21, Stack(s) S50, S51, S52, S53 — MRC 6-Installed 2004
22. Process P22, Stack(s) S40, S41, S42, S43, S48, Control Device(s) C05 — CF6 ceramic Fiber Firing-Last Modified 2003

Permit Shield — Unless precluded by the Administrator of the US EPA, compliance with all emission limitations in this operation permit is considered to be compliance with all emission limitations established under ss. 285.01 to 285.87, Wis. Stats., and emission limitations under the federal clean air act, that are applicable to the source if the permit includes the applicable limitation or if the Department determines that the emission limitations do not apply. The following emission limitations were reviewed in the analysis and preliminary determination and were determined not to apply to this stationary source:

P15, P16, P17, P18 P19, P22 are not subject to NSPS in s. NR 440.67, Wis. Adm. Code for Synthetic fiber production facilities

Parts I and III — The headings for the areas in the permit are defined below. The legal authority for these limitations or methods follows them in [brackets].

Pollutant – This area will note which pollutant is being regulated by the permit.

Limitations – This area will list all applicable emission limitations that apply to the source, including case-by-case limitations such as Latest Available Control Techniques (LACT), Best Available Control Technology (BACT), or Lowest Achievable Emission Rate (LAER). It will also list any voluntary restrictions on hours of operation, raw material use, or production rate requested by the permittee to limit potential to emit.

Compliance Demonstration – The compliance demonstration methods outlined in this area may be used to demonstrate compliance with the associated emission limit or work practice standard listed under the corresponding **Limitations** column. The compliance demonstration area contains limits on parameters or other mechanisms that will be monitored periodically to ensure compliance with the limitations. The requirement to test as well as initial and periodic test schedules, if testing is required, will be stated here. Notwithstanding the compliance determination methods which the owner or operator of a sources is authorized to use under ch. NR 439, Wis. Adm. Code, the Department may use any relevant information or appropriate method to determine a source's compliance with applicable emission limitations.

Reference Test Methods, Recordkeeping, and Monitoring Requirements – Specific USEPA Reference test methods or other approved test methods will be contained in this area and are the methods that must be used whenever testing is required. A reference test method will be listed even if no testing is immediately required. Also included in this area are any recordkeeping requirements and their frequency and reporting requirements. Accuracy of monitoring equipment shall meet, at a minimum, the requirements of s. NR 439.055(3) and (4), Wis. Adm. Code, as specified in Part II of this permit.

Condition Type – This area will specify other conditions that are applicable to the entire facility that may not be tied to one specific pollutant.

Conditions – Specific conditions usually applicable to the entire facility or compliance requirements.

Compliance Demonstration – This area contains monitoring and testing requirements and methods to demonstrate compliance with the conditions.

PART II — This section contains the general limitations that the permittee must abide by. These requirements are standard for most sources of air pollutants so they are included in this section with every permit.

PART I
APPLICABLE EMISSION LIMITATIONS AND REQUIREMENTS

Part I permits existing sources at the 3M Menomonie facility regardless if the Environmental Cooperative Agreement with the Department as entered into under s. 299.80 Wis. Stats. is effective. Part III. contains construction permit requirements and permits any future projects/facility changes listed in Part III.A. of this construction permit and operation permit. All projects/facility changes installed under Part III of construction permit 04-SJZ-142 and operation permit 617056660-P01 after the issuance of this operation permit shall operate under these conditions even if the Environmental Cooperative Agreement expires or is revoked. If the Environmental Cooperative Agreement expires or is revoked for any reason, the installation of any future project/facility changes under Part III.A. of this construction permit and operation permit will be prohibited. Any future projects/facility changes shall then be permitted according to the traditional NR 406, Wis. Adm. Code, construction permitting program. If the Environmental Cooperative Agreement expires or is revoked for any reason, the permittee shall comply with any delayed compliance deadlines and practical interim requirements established by the Department in a written revocation decision until the Department issues the approvals required under chs. 280 to 295, Wis. Stats, that were replaced by the above referenced Environmental Cooperative Agreement.

I. A. Process P01, Stack S01 — 21 Million BTU/hr Kewaunee Boiler-Installed 1996

Pollutant	a. Emission Limitations	b. Compliance Demonstration	c. Reference Test Methods, Recordkeeping and Monitoring Requirements
1. Particulate Matter	(1) 0.300 pounds per hour of particulate matter.[1] [s. 285.65(7), Wis. Stats.]	(1) **USE:** natural gas **OR** No. 2 fuel oil only as combustion fuel [s. NR 407.09(4)(a)3.b., Wis. Adm. Code and s. 285.65(7), Wis. Stats.] (2) **INSPECT:** for proper boiler operation only when the boiler is operating Frequency: weekly [s. NR 407.09(1)(c)1.b., Wis. Adm. Code]	(1) **REFERENCE TEST METHOD: PM** **IF:** emissions testing is requested by the Department for purposes of determining compliance with the PM emissions limit, **THEN:** use U.S. EPA Method 5 **AND** Method 202 to include condensable particulate matter emissions, **OR:** other methods as approved by the Department. [s. NR 439.06(1), Wis. Adm. Code.] (2) The permittee shall keep monthly records of the type and amount of fuel used. Copies of the records will be maintained onsite and available for DNR inspection. [ss. NR 439.04(1)(d) and NR 439.04(2) Wis. Adm. Code]
2. Sulfur Dioxide	(1) Sulfur content of fuel oil combusted shall not exceed 0.05% by weight.[2] [96-MMH-607 and s. 285.65(7), Wis. Stats.]	(1) **OBTAIN:** certification from the fuel oil supplier stating the sulfur content by weight of the fuel oil Frequency: upon each delivery of fuel oil, or as demonstrated by specifications in a standing purchase order [s. NR 440.207(9)(l)1., Wis. Adm. Code]	(1) **REPORT:** with the Monitoring Summary Report required in Part I.J.4.b(1) Content: fuel oil certificates or evidence from a purchase order [s. NR 440.207(9)(e)11., Wis. Adm. Code] (2) **REFERENCE TEST METHOD: SO2** **IF:** emissions testing is requested by the Department for purposes of determining compliance with the SO2 emissions limit, **THEN:** use U.S. EPA Method 6, 6A, 6B

[1] The particulate limit of 0.300 lb/hr was established by modeling in construction permit 04-SJZ-142 and operation permit 617056660-P01.

[2] The percent sulfur limit was requested by the facility and established in construction permit 96-MMH-607 by modeling in order for sulfur dioxide emissions to meet the ambient air quality standards.

I. A. Process P01, Stack S01 — 21 Million BTU/hr Kewaunee Boiler-Installed 1996

Pollutant	a. Emission Limitations	b. Compliance Demonstration	c. Reference Test Methods, Recordkeeping and Monitoring Requirements
2. Sulfur Dioxide (continued)			or 6C, **OR:** other methods as approved by the Department. [s. NR 439.06(2)(a), Wis. Adm. Code]
3. Visible Emissions	(1) 20% Opacity [s. NR 431.05, Wis. Adm. Code]	(1) See Particulate Matter and Sulfur Dioxide Emission compliance demonstration requirements listed above.	(1) **REFERENCE TEST METHOD: Visible Emissions** **IF:** emissions testing is requested by the Department for purposes of determining compliance with the visible emissions limit, **THEN:** use U.S. EPA Method 9, **OR:** other methods as approved by the Department. [s. NR 439.06(9)(a)1., Wis. Adm. Code] (2) The recordkeeping requirements for particulate matter emissions outlined in condition I.A.1.c.(2) also serve as recordkeeping requirements for visible emissions for boiler P01. [s. NR 407.09(1)(c)1.a., Wis. Adm. Code]

I. B. Process P02, Stack S02 — 13.3 Million BTU/hr Kewaunee Boiler-Installed 1974

Pollutant	a. Emission Limitations	b. Compliance Demonstration	c. Reference Test Methods, Recordkeeping and Monitoring Requirements
1. Particulate Matter	(1) 0.190 pounds per hour of particulate matter.[3] [s. 285.65(7), Wis. Stats.]	(1) **USE:** natural gas **OR** No. 2 fuel oil only as combustion fuel. [s. NR 407.09(4)(a)3.b., Wis. Adm. Code and s. 285.65(7), Wis. Stats.]	(1) **REFERENCE TEST METHOD: PM** **IF:** emissions testing is requested by the Department for purposes of determining compliance with the PM emissions limit, **THEN:** use U.S. EPA Method 5 **AND** Method 202 to include condensable particulate matter emissions, **OR:** other methods as approved by the Department. [s. NR 439.06(1), Wis. Adm. Code.] (2) The permittee shall keep monthly records of the type and amount of fuel used. Copies of the records will be maintained onsite and available for DNR inspection. [ss. NR 439.04(1)(d) and NR 439.04(2) Wis. Adm. Code]
2. Sulfur Dioxide	(1) Sulfur content of fuel oil combusted shall not exceed 0.05% by weight.[4] [s. 285.65(7), Wis. Stats.]	(1) **USE:** natural gas **OR** No. 2 fuel oil only as combustion fuel [s. NR 407.09(4)(a)3.b., Wis. Adm. Code and s. 285.65(7), Wis. Stats.] (2) **OBTAIN:** certification from the fuel oil supplier stating the sulfur content by weight of the fuel oil Frequency: upon each delivery of fuel oil, or as demonstrated by specifications in a standing purchase order [s. NR 440.207(9)(l)1., Wis. Adm. Code]	(1) **REPORT:** with the Monitoring Summary Report required in Part I.J.4.b(1) Content: fuel oil certificates or evidence from a purchase order [s. NR 440.207(9)(e)11., Wis. Adm. Code] (2) **REFERENCE TEST METHOD: SO2** **IF:** emissions testing is requested by the Department for purposes of determining compliance with the SO2 emissions limit, **THEN:** use U.S. EPA Method 6, 6A, 6B or 6C, **OR:** other methods as approved by the Department. [s. NR 439.06(2)(a), Wis. Adm. Code]
3. Visible Emissions	(1) 20% Opacity [s. NR 431.05, Wis. Adm. Code]	(1) See Particulate Matter and Sulfur Dioxide Emission compliance demonstration requirements listed above.	(1) **REFERENCE TEST METHOD: Visible Emissions** **IF:** emissions testing is requested by the Department for purposes of determining compliance with the visible emissions limit, **THEN:** use U.S. EPA Method 9, **OR:** other methods as approved by the Department. [s. NR 439.06(9)(a)1., Wis. Adm. Code]

[3] The particulate limit of 0.190 lb/hr was established by modeling in construction permit 04-SJZ-142 and operation permit 617056660-P01.

[4] The facility has voluntarily decided to limit boilers P02, P03, P04, and P05 to the same percent sulfur limit of 0.05% required for boiler P01.

I. B. Process P02, Stack S02 — 13.3 Million BTU/hr Kewaunee Boiler-Installed 1974

Pollutant	a. Emission Limitations	b. Compliance Demonstration	c. Reference Test Methods, Recordkeeping and Monitoring Requirements
3. Visible Emissions (continued)			(2) The recordkeeping requirements for particulate matter emissions outlined in condition I.B.1.c.(2) also serve as recordkeeping requirements for visible emissions for boiler P02. [s. NR 407.09(1)(c)1.a., Wis. Adm. Code]

I. C. Process P03, Stack S03 — Cleaver-Brooks 16.7 Million BTU/hr Boiler-Installed 1980

Pollutant	a. Emission Limitations	b. Compliance Demonstration	c. Reference Test Methods, Recordkeeping and Monitoring Requirements
1. Particulate Matter Emissions	(1) 0.239 pounds per hour of particulate matter.[5] [s. 285.65(7), Wis. Stats.]	(1) **USE:** natural gas **OR** No. 2 fuel oil only as combustion fuel. [s. NR 407.09(4)(a)3.b., Wis. Adm. Code and s. 285.65(7), Wis. Stats.]	(1) **REFERENCE TEST METHOD: PM** **IF:** emissions testing is requested by the Department for purposes of determining compliance with the PM emissions limit, **THEN:** use U.S. EPA Method 5 **AND** Method 202 to include condensable particulate matter emissions, **OR:** other methods as approved by the Department. [s. NR 439.06(1), Wis. Adm. Code.] (2) The permittee shall keep monthly records of the type and amount of fuel used. Copies of the records will be maintained onsite and available for DNR inspection. [ss. NR 439.04(1)(d) and NR 439.04(2) Wis. Adm. Code]
2. Sulfur Dioxide	(1) Sulfur content of fuel oil combusted shall not exceed 0.05% by weight.[6] [s. 285.65(7), Wis. Stats.]	(1) **USE:** natural gas **OR** No. 2 fuel oil only as combustion fuel [s. NR 407.09(4)(a)3.b., Wis. Adm. Code and s. 285.65(7), Wis. Stats.] (2) **OBTAIN:** certification from the fuel oil supplier stating the sulfur content by weight of the fuel oil Frequency: upon each delivery of fuel oil, or as demonstrated by specifications in a standing purchase order [s. NR 440.207(9)(l)1., Wis. Adm. Code]	(1) **REPORT:** with the Monitoring Summary Report required in Part I.J.4.b(1) Content: fuel oil certificates or evidence from a purchase order [s. NR 440.207(9)(e)11., Wis. Adm. Code] (2) **REFERENCE TEST METHOD: SO2** **IF:** emissions testing is requested by the Department for purposes of determining compliance with the SO2 emissions limit, **THEN:** use U.S. EPA Method 6, 6A, 6B or 6C, **OR:** other methods as approved by the Department. [s. NR 439.06(2)(a), Wis. Adm. Code]
3. Visible Emissions	(1) 20% Opacity [s. NR 431.05, Wis. Adm. Code]	(1) See Particulate Matter and Sulfur Dioxide Emission compliance demonstration requirements listed above.	(1) **REFERENCE TEST METHOD: Visible Emissions** **IF:** emissions testing is requested by the Department for purposes of determining compliance with the visible emissions limit, **THEN:** use U.S. EPA Method 9, **OR:** other methods as approved by the Department. [s. NR 439.06(9)(a)1., Wis. Adm. Code] (2) The recordkeeping requirements for particulate matter

[5] The particulate limit of 0.239 lb/hr was established by modeling in construction permit 04-SJZ-142 and operation permit 617056660-P01.

[6] The facility has voluntarily decided to limit boilers P02, P03, P04, and P05 to the same percent sulfur limit of 0.05% required for boiler P01.

I. C. Process P03, Stack S03 — Cleaver-Brooks 16.7 Million BTU/hr Boiler-Installed 1980

Pollutant	a. Emission Limitations	b. Compliance Demonstration	c. Reference Test Methods, Recordkeeping and Monitoring Requirements
3. Visible Emissions (continued)			emissions outlined in condition I.C.1.c.(2) also serve as recordkeeping requirements for visible emissions for boiler P03. [s. NR 407.09(1)(c)1.a., Wis. Adm. Code]

I. D. Process P04, Stack S04 — ABCO 10.5 Million BTU/hr Boiler-Installed 1989

Pollutant	a. Emission Limitations	b. Compliance Demonstration	c. Reference Test Methods, Recordkeeping and Monitoring Requirements
1. Particulate Matter Emissions	(1) 0.150 pounds per hour of particulate matter.[7] [s. 285.65(7), Wis. Stats.]	(1) **USE:** natural gas **OR** No. 2 fuel oil only as combustion fuel. [s. NR 407.09(4)(a)3.b., Wis. Adm. Code and s. 285.65(7), Wis. Stats.]	(1) **REFERENCE TEST METHOD: PM** **IF:** emissions testing is requested by the Department for purposes of determining compliance with the PM emissions limit, **THEN:** use U.S. EPA Method 5 **AND** Method 202 to include condensable particulate matter emissions, **OR:** other methods as approved by the Department. [s. NR 439.06(1), Wis. Adm. Code.] (2) The permittee shall keep monthly records of the type and amount of fuel used. Copies of the records will be maintained onsite and available for DNR inspection. [ss. NR 439.04(1)(d) and NR 439.04(2) Wis. Adm. Code]
2. Sulfur Dioxide	(1) Sulfur content of fuel oil combusted shall not exceed 0.05% by weight.[8] [s. 285.65(7), Wis. Stats.]	(1) **USE:** natural gas **OR** No. 2 fuel oil only as combustion fuel [s. NR 407.09(4)(a)3.b., Wis. Adm. Code and s. 285.65(7), Wis. Stats.] (2) **OBTAIN:** certification from the fuel oil supplier stating the sulfur content by weight of the fuel oil Frequency: upon each delivery of fuel oil, or as demonstrated by specifications in a standing purchase order [s. NR 440.207(9)(l)1., Wis. Adm. Code]	(1) **REPORT:** with the Monitoring Summary Report required in Part I.J.4.b(1) Content: fuel oil certificates or evidence from a purchase order [s. NR 440.207(9)(e)11., Wis. Adm. Code] (2) **REFERENCE TEST METHOD: SO2** **IF:** emissions testing is requested by the Department for purposes of determining compliance with the SO2 emissions limit, **THEN:** use U.S. EPA Method 6, 6A, 6B or 6C, **OR:** other methods as approved by the Department. [s. NR 439.06(2)(a), Wis. Adm. Code]
3. Visible Emissions	(1) 20% Opacity [s. NR 431.05, Wis. Adm. Code]	(1) See Particulate Matter and Sulfur Dioxide Emission compliance demonstration requirements listed above.	(1) **REFERENCE TEST METHOD: Visible Emissions** **IF:** emissions testing is requested by the Department for purposes of determining compliance with the visible emissions limit, **THEN:** use U.S. EPA Method 9, **OR:** other methods as approved by the Department. [s. NR 439.06(9)(a)1., Wis. Adm. Code] (2) The recordkeeping requirements for particulate matter

[7] The particulate limit of 0.150 lb/hr was established by modeling in construction permit 04-SJZ-142 and operation permit 617056660-P01.

[8] The facility has voluntarily decided to limit boilers P02, P03, P04, and P05 to the same percent sulfur limit of 0.05% required for boiler P01.

I. D. Process P04, Stack S04 — ABCO 10.5 Million BTU/hr Boiler-Installed 1989

Pollutant	a. Emission Limitations	b. Compliance Demonstration	c. Reference Test Methods, Recordkeeping and Monitoring Requirements
3. Visible Emissions (continued)			emissions outlined in condition I.D.1.c.(2) also serve as recordkeeping requirements for visible emissions for boiler P04. [s. NR 407.09(1)(c)1.a., Wis. Adm. Code]

I. E. Process P05, Stack S05 — ABCO 10.5 Million BTU/hr Boiler-Installed 1989

Pollutant	a. Emission Limitations	b. Compliance Demonstration	c. Reference Test Methods, Recordkeeping and Monitoring Requirements
1. Particulate Matter Emissions	(1) 0.150 pounds per hour of particulate matter.[9] [s. 285.65(7), Wis. Stats.]	(1) **USE:** natural gas **OR** No. 2 fuel oil only as combustion fuel. [s. NR 407.09(4)(a)3.b., Wis. Adm. Code and s. 285.65(7), Wis. Stats.]	(1) **REFERENCE TEST METHOD: PM** **IF:** emissions testing is requested by the Department for purposes of determining compliance with the PM emissions limit, **THEN:** use U.S. EPA Method 5 **AND** Method 202 to include condensable particulate matter emissions, **OR:** other methods as approved by the Department. [s. NR 439.06(1), Wis. Adm. Code.] (2) The permittee shall keep monthly records of the type and amount of fuel used. Copies of the records will be maintained onsite and available for DNR inspection. [ss. NR 439.04(1)(d) and NR 439.04(2) Wis. Adm. Code]
2. Sulfur Dioxide	(1) Sulfur content of fuel oil combusted shall not exceed 0.05% by weight. [10] [s. 285.65(7), Wis. Stats.]	(1) **USE:** natural gas **OR** No. 2 fuel oil only as combustion fuel [s. NR 407.09(4)(a)3.b., Wis. Adm. Code and s. 285.65(7), Wis. Stats.] (2) **OBTAIN:** certification from the fuel oil supplier stating the sulfur content by weight of the fuel oil Frequency: upon each delivery of fuel oil, or as demonstrated by specifications in a standing purchase order [s. NR 440.207(9)(l)1., Wis. Adm. Code]	(1) **REPORT:** with the Monitoring Summary Report required in Part I.J.4.b(1) Content: fuel oil certificates or evidence from a purchase order [s. NR 440.207(9)(e)11., Wis. Adm. Code] (2) **REFERENCE TEST METHOD: SO2** **IF:** emissions testing is requested by the Department for purposes of determining compliance with the SO2 emissions limit, **THEN:** use U.S. EPA Method 6, 6A, 6B or 6C, **OR:** other methods as approved by the Department. [s. NR 439.06(2)(a), Wis. Adm. Code]
3. Visible Emissions	(1) 20% Opacity [s. NR 431.05, Wis. Adm. Code]	(1) See Particulate Matter and Sulfur Dioxide Emission compliance demonstration requirements listed above.	(1) **REFERENCE TEST METHOD: Visible Emissions** **IF:** emissions testing is requested by the Department for purposes of determining compliance with the visible emissions limit, **THEN:** use U.S. EPA Method 9, **OR:** other methods as approved by the Department. [s. NR 439.06(9)(a)1., Wis. Adm. Code] (2) The recordkeeping requirements for particulate matter

[9] The particulate limit of 0.150 lb/hr was established by modeling in construction permit 04-SJZ-142 and operation permit 617056660-P01.

[10] The facility has voluntarily decided to limit boilers P02, P03, P04, and P05 to the same percent sulfur limit of 0.05% required for boiler P01.

I. E. Process P05, Stack S05 — ABCO 10.5 Million BTU/hr Boiler-Installed 1989

Pollutant	a. Emission Limitations	b. Compliance Demonstration	c. Reference Test Methods, Recordkeeping and Monitoring Requirements
3. Visible Emissions (continued)			emissions outlined in condition I.E.1.c.(1) also serve as recordkeeping requirements for visible emissions for boiler P05. [s. NR 407.09(1)(c)1.a., Wis. Adm. Code]

I. F. Process I2 — E-Beam
Process I6 — Hot Melt Coater (PC&RP Division)
Process I7 — Elastic Coating 1 (PC&RP Division)
Process I8 — Elastic Coating 2 (PC&RP Division)
Process P06, S06, S36; P10, S10, S20; P11, S11, S21; P12, S12; P13, S13, S23; P21, S50, S51, S52, S53 — MRC Resin Coating Lines-Last Modified 2000, Installed 2003, 2004
Process P07, Stack(s) S07, S22, S24, S49 — Tape Coating-Installed 1983
Process P20, Stack(s) S31, S32, S33 — Gamma Line-Installed 2004

The 3M Menomonie plant is an existing affected source and is subject to the federal MACT standard for Paper and Other Web Coating [POWC] in 40 CFR 63 subpart JJJJ. On the basis of a streamlining demonstration [Attached in Appendix A] the following additional rules apply to these coating lines:

- NR 424 Control of Organic Compound Emissions from Process Lines
- NR 422 Control of Organic Compound Emissions from Surface Coating, Printing, and Asphalt Surfacing Operations
- 40 CFR 60 Subpart RR Pressure Sensitive Tape and Label Surface Coating

When the Paper and Other Web Coating MACT is applied on the basis of VOC rather than organic-HAP emissions, requirements in the Paper and Other Web Coating MACT are more restrictive than the requirements listed in s. NR 424, Wis. Adm. Code, s. NR 422, Wis. Adm. Code, and 40 CFR 60 Subpart RR, however these requirements still apply. Because of this, requirements in the Paper and Other Web Coating MACT only are listed in section I.F below. Operating techniques determined by LACT have also been included.

3M has volunteered to comply the Paper and Other Web MACT as of the date of issuance of the Title V operating permit, which is well in advance of the otherwise applicable compliance date of December 5, 2005.

I. F. Process I2 — E-Beam
Process I6 — Hot Melt Coater (PC&RP Division)
Process I7 — Elastic Coating 1 (PC&RP Division)
Process I8 — Elastic Coating 2 (PC&RP Division)
Process P06, S06, S36; P10, S10, S20; P11, S11, S21; P12, S12; P13, S13, S23; P21, S50, S51, S52, S53 — MRC Resin Coating Lines-Last Modified 2000, Installed 2003, 2004
Process P07, Stack(s) S07, S22, S24, S49 — Tape Coating-Installed 1983
Process P20, Stack(s) S31, S32, S33 — Gamma Line-Installed 2004

Pollutant	a. Emission Limitations	b. Compliance Demonstration	c. Reference Test Methods, Recordkeeping and Monitoring Requirements
1. Volatile Organic Compounds [VOC] and	(1) **COMPLIANCE DATE:** The permittee shall comply with requirement I.F.1.a.(2) for the E-beam, TCM Extrusion Coating,	(1) **DEMONSTRATE:** compliance with the VOC emission limits in I..F.1.a.(2) each month according to I.F.1.b(2), I.F.1.b(3), **OR** I.F.1.b(4), applied in any combination to each of the coating materials used by the	(1) **DETERMINE AND RECORD:** the total mass of each coating material applied each month to each web coating line of the MACT JJJJ Affected Source [40 CFR 63.3410(b) and s. 285.65(13), Wis. Stats.]

I. F. Process I2 — E-Beam
Process I6 — Hot Melt Coater (PC&RP Division)
Process I7 — Elastic Coating 1 (PC&RP Division)
Process I8 — Elastic Coating 2 (PC&RP Division)
Process P06, S06, S36; P10, S10, S20; P11, S11, S21; P12, S12; P13, S13, S23; P21, S50, S51, S52, S53 — MRC Resin Coating Lines-Last Modified 2000, Installed 2003, 2004
Process P07, Stack(s) S07, S22, S24, S49 — Tape Coating-Installed 1983
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Pollutant	a. Emission Limitations	b. Compliance Demonstration	c. Reference Test Methods, Recordkeeping and Monitoring Requirements
Organic Hazardous Air Pollutant (OHAP) Emissions	PCRP Hook Line Extrusion Coating, and PCRP Tape Line Hot Melt Coating lines, MRC Resin Coating Lines 1-6, the tape coating line, and the gamma line as of the effective date of this Title V operating permit. [40 CFR 63.3330(a) and s. 285.65(13), Wis. Stats.] (2) **LIMIT:** VOC emissions each month, from the collection of all web coating lines, to the level specified in (a) **OR** (b): (a) No more than 4 percent of the mass of coating materials applied for each month; **OR** (b) No more than 20 percent of the mass of coating solids applied for each month [40 CFR 63.3320(b) and s. 285.65(13), Wis. Stats.] (3) The total monthly VOC usage for the MRC Resin Coating Lines P10, P11, P12, and P13 shall not exceed an average of 6,650 pounds	web coating lines subject to 40 CFR 63 subpart JJJJ MACT standard [s. 285.65(13), Wis. Stats.] (2) **"As-Purchased" Compliant Coating Materials. DEMONSTRATE:** that each coating material applied during the month contains no more than 0.04 kg VOC per kg of coating material (0.04 lb VOC per lb of coating material), **OR** no more than 0.2 kg VOC per kg coating solids (0.2 lb VOC per lb coating solids) **HOW:** by determining the VOC **AND/OR** solids content of each coating material applied, on an as-purchased basis, according to I.F.1.b(4) [40 CFR 63.3370(c)(5)(i) and s. 285.65(13), Wis. Stats.] (3) **"As-Applied" Compliant Coating Materials. DEMONSTRATE:** that the monthly average VOC content of all as-applied coating materials is no more than 0.04 kg VOC per kg of coating material (0.04 lb VOC per lb of coating material), **OR** no more than 0.2 kg VOC per kg coating solids (0.2 lb VOC per lb coating solids), as determined according to I.F.1.b(3)(a) **OR** (b), as applicable [40 CFR 63.3370(c)(5)(ii) and s. 285.65(13), Wis. Stats.] (a) **DEMONSTRATE:** $H_L \leq 0.04$, as calculated according to Equation 4 of 40 CFR 63.3370(c)(3) where H_L = Monthly average, as-applied, organic HAP content of all coating materials applied, expressed as kg organic HAP per kg of coating material applied, kg/kg ((lb organic HAP/lb coating	**HOW:** • by direct measurement, **OR** • by calculation based on the amount of each product made by each web coating line and the corresponding coating formulation of those products, plus any materials added (e.g. solvent thinning of a coating), **OR** • by other method, as approved by WDNR (2) **DETERMINE AND RECORD:** "as-purchased" volatile organic content **AND** coating solids content of each coating material applied, as applicable and consistent with the compliance demonstration elected at I.F.1.b. The term "as-purchased" is intended to apply to any single material or combination of materials [for example, the entire coating, as applied at the web] for which volatile organic content **AND/OR** coating solids content has been determined by one of the following methods • by testing using EPA Method 24 [40 CFR part 60, Appendix A], according to 40 CFR 63.3360(d)(1), **OR** • by formulation data, according to 40 CFR 63.3360(d)(2), **OR** • by an alternative test method, approved by the Administrator at EPA in accordance with 40 CFR 63.7(f) (3) As is provided by 40 CFR 63.3400(b), the initial notification required under 40 CFR 63.9(b) is deemed to have been satisfied by the application for this Title V

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Process P07, Stack(s) S07, S22, S24, S49 — Tape Coating-Installed 1983
Process P20, Stack(s) S31, S32, S33 — Gamma Line-Installed 2004

Pollutant	a. Emission Limitations	b. Compliance Demonstration	c. Reference Test Methods, Recordkeeping and Monitoring Requirements
1. Volatile Organic Compounds [VOC] and Organic Hazardous Air Pollutant (OHAP) Emissions (continued)	per month averaged over any 12 consecutive month period.[11] [00-JAS-606 and s. 285.65(7), Wis. Stats.] (4) Latest Available Control Techniques and operating practices (LACT) for the MRC Resin Coating Lines P10, P11, P12, and P13 has been determined to be the following: (a) the use of UV curable resins [00-JAS-606, s. NR 424.03(2)(c), Wis. Adm. Code, s. 285.65(3) and s. 285.65(7), Wis. Stats.] (5) For process P20, the Latest Available Control Techniques and Operating Practices Demonstrating Best Current Technology (LACT) have been determined to be the following workpractice:[12] (a) utilizing water-based solutions as its main coating solution	solids applied)), **OR** (b) **DEMONSTRATE:** $H_s \leq 0.20$, as calculated according to Equation 5 of 40 CFR 63.3370(c)(4) H_s = Monthly average, as-applied, organic HAP to coating solids ratio, expressed as kg organic HAP/kg coating solids applied, kg/kg (lb organic HAP/lb coating solids applied) (4) **MAY ELECT:** a different method of compliance demonstration not listed above that is provided in 40 CFR Subpart JJJJ (5) **DEMONSTRATE:** The daily coating usage records and VOC contents for the MRC Resin Coating Lines P10, P11, P12, and P13 shall be used to calculate daily VOC emission rates. [s. NR 439.04, Wis. Adm. Code] (6) **DEMONSTRATE:** The daily VOC calculations (in pounds of VOC's) for the MRC Resin Coating Lines P10, P11, P12, and P13 shall be summed together each month to determine the total monthly VOC usage of the process. This calculation will be performed within 14 days for the previous calendar month. [s. NR 439.04, Wis. Adm. Code]	permit. [40 CFR 63.3400(b) and s. 285.65(13), Wis. Stats.] (4) **REPORT:** Semi-annual Compliance Report **DUE:** submit as part of the semi-annual Title V Periodic Monitoring Report **CONTENT:** according to 40 CFR 3400(c)(2), as applicable [40 CFR 63.3400(c), (c)(1)(v) and s. 285.65(13), Wis. Stats.] (5) **RECORDKEEPING:** The permittee shall keep and maintain on site a Material Safety Data Sheet (MSDS) or equivalent to document the VOC content of each coating used in processes P10, P11, P12, and P13. [s. NR 439.04(1)(d), Wis. Adm. Code] (6) The facility shall maintain daily records of the quantity of resins and solvents used in processes P10, P11, P12, and P13. [s. NR 439.04, Wis. Adm. Code] (7) The facility shall maintain monthly records of the total monthly VOC emissions from processes P10, P11, P12, and P13. [s. NR 439.04, Wis. Adm. Code]

[11] This condition was a limit requested by the facility established in construction permit 00-JAS-606 to assure that potential emissions from this combination of equipment would be less than 40 tons per year; that is, the significant emissions threshold under PSD. MRC 5 (process P06) and MRC 6 (process P21) are not subject to the 6,650 lb/month VOC limit because these processes are insignificant sources determined in exempt permits 03-JAJ-105 for MRC 5 and 04-SJZ-145-EXM for MRC 6.

[12] This LACT determination also includes limiting VOC emissions from process P20 to no more than 1,666 pounds per month, determined as an average over each consecutive 12 month period (10 TPY). This VOC limit still applies to process P20 but has not been listed here in an effort to streamline permit requirements.

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Process P06, S06, S36; P10, S10, S20; P11, S11, S21; P12, S12; P13, S13, S23; P21, S50, S51, S52, S53 — MRC Resin Coating Lines-Last Modified 2000, Installed 2003, 2004
Process P07, Stack(s) S07, S22, S24, S49 — Tape Coating-Installed 1983
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Pollutant	a. Emission Limitations	b. Compliance Demonstration	c. Reference Test Methods, Recordkeeping and Monitoring Requirements
1. Volatile Organic Compounds [VOC] and Organic Hazardous Air Pollutant (OHAP) Emissions (continued)	[03-JAJ-054, s. NR 424.03(2)(c), Wis. Adm. Code, s. 285.65(3) and s. 285.65(7), Wis. Stats.]	(7) **DEMONSTRATE:** The total monthly VOC usage (in pounds of VOC's) for the MRC Resin Coating Lines P10, P11, P12, and P13 from the last "n" months shall be summed and the result divided by "n" to yield the monthly average VOC usage. The integer number "n" is the number of months since initial operation of the source (not to exceed 12). Once 12 months have passed since initial operation, the facility shall continue to use n = 12. This shall be used to determine the compliance the synthetic minor condition. [s. NR 439.04, Wis. Adm. Code] (8) **DEMONSTRATE:** The monthly VOC emissions (in pounds of VOC's) for the web coating lines I2, I6, I7, I8, P06, P10, P11, P12, P13, P21, P07, and P20 shall be summed together each month to determine the total monthly VOC emissions from all the web coating lines. This calculation will be performed within 14 days for the previous calendar month. [s. NR 439.04, Wis. Adm. Code] (9) **DEMONSTRATE:** The total monthly VOC usage (in pounds of VOC's) for the web coating lines I2, I6, I7, I8, P06, P10, P11, P12, P13, P21, P07, and P20 from the last "n" months shall be summed and the result divided by "n" to yield the monthly average VOC usage. The integer number "n" is the number of months since initial operation of the source (not to exceed 12). Once 12 months have passed since initial operation, the facility shall continue to use n = 12. This shall be used to determine the compliance the synthetic minor condition.	

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Process P07, Stack(s) S07, S22, S24, S49 — Tape Coating-Installed 1983
Process P20, Stack(s) S31, S32, S33 — Gamma Line-Installed 2004

Pollutant	a. Emission Limitations	b. Compliance Demonstration	c. Reference Test Methods, Recordkeeping and Monitoring Requirements
1. Volatile Organic Compounds [VOC] and Organic Hazardous Air Pollutant (OHAP) Emissions (continued)		[s. NR 439.04, Wis. Adm. Code]	

I. G. Process P08, S08, S34, S35, Control Device(s) C03, C04 — Chrome Plating Process-Installed 2003 Process P14, S14, Control Device(s) C02 — Chrome Plating Process-Installed 1996

The chromium plating baths Process P08 and the chromium plating baths of Process P14 constitute two, distinct, existing Affected Sources under the federal MACT standard for Hard and Decorative Chromium Electroplating and Chromium Anodizing Tanks [40 CFR 63 sub N]. Requirements listed below for chromium emissions apply separately to the two MACT Affected Sources. Requirements listed below for pollutants other than chromium apply separately but to all of Process P08 and P14.

I. G. Process P08, S08, S34, S35, Control Device(s) C03, C04 — Chrome Plating Process-Installed 2003 Process P14, S14, Control Device(s) C02 — Chrome Plating Process-Installed 1996

Pollutant	a. Emission Limitations	b. Compliance Demonstration	c. Reference Test Methods, Recordkeeping and Monitoring Requirements
1. Chromium Emissions From Hard and Decorative Chromium Electroplating and Chromium Anodizing Tanks	(1) 0.015 mg/dscm, as total chromium at the exhaust of the mesh filter/HEPA filter [C03] for the chromium plating bath and fabric filter (C04) for the Cladding Booth for Process P08.[13] [03-JAJ-055 and 40 CFR 63.342(b)(1)] (2) 0.015 mg/dscm, as total chromium at the exhaust of the mesh filter/HEPA filter [C02] for the chromium plating bath of Process P14.[14] [97-MMH-605 and 40 CFR 63.342(b)(1)] (3) The above emission limitations apply during tank operation as well as during periods of startup and shutdown. The emission limitations do not apply during periods of malfunction. However, work practice standards that address operation and maintenance and that are required by I.G.(1)b. shall be	(1) **OPERATE and MAINTAIN:** each affected source [the chromium plating baths of Process P08 and the chromium plating baths of P14, considered separately], including associated air pollution control devices and monitoring equipment, in a manner consistent with good air pollution control practices, consistent with the operation and maintenance plan required by I.G.(1)b.(3), including during periods of startup, shutdown, and malfunction [40 CFR 63.342(f)(1)(i)] (2) **MALFUNCTIONS:** the permittee shall correct each malfunction as soon as practicable, according to the O&M Plan [40 CFR 63.342(f)(1)(ii)] (3) **OPERATION AND MAINTENANCE PLAN [O&M]** [40 CFR 63.342(f)(3)] (a) The permittee shall prepare an O&M Plan with content according to 40 CFR 63.342(f)(3)(i). A single plan may be written to cover more than one MACT Affected Source, and this requirement may be met in part or in full using (SOP) manuals, OSHA plans, and/or other existing plans.	The following requirements apply separately to each MACT Affected Source [the chromium plating baths of Process P08 and P14] (1) **INSPECT and RECORD:** visually inspect, once per quarter, each composite mesh-pad [CMP] system air pollution control device as follows: (a) overall CMP inspection, to ensure proper drainage, no chronic acid buildup on pads, and no evidence of chemical attack on structure (b) the back part of the mesh pad closest to the fan to ensure no breakthrough of chromic acid mist (c) ductwork from the tank to the CMP to ensure no leaks [40 CFR 63.342 Table 1, 40 CFR 63.346(b)(1)] (2) **PERFORM and RECORD:** washdown of the mesh-pads of each CMP [C03 and C04], according to the frequency specified by the manufacture, or equal [40 CFR 63.342 Table 1, 40 CFR 63.346(b)(1)] (3) **MONITOR and RECORD:** pressure drop across each CMP [C02, C03] and fabric filter [C04],

[13] At a flow rate of 1,600 actual cubic feet per minute and an stack exhaust temperature of 80 degrees Fahrenheit, 0.015 milligram per dry standard cubic meter is equivalent to 8.61E-05 pounds per hour.

[14] At a flow rate of 950 actual cubic feet per minute and an stack exhaust temperature of 72 degrees Fahrenheit, 0.015 milligram per dry standard cubic meter is equivalent to 5.19E-05 pounds per hour.

I. G. Process P08, S08, S34, S35, Control Device(s) C03, C04 — Chrome Plating Process-Installed 2003
Process P14, S14, Control Device(s) C02 — Chrome Plating Process-Installed 1996

Pollutant	a. Emission Limitations	b. Compliance Demonstration	c. Reference Test Methods, Recordkeeping and Monitoring Requirements
1. Chromium Emissions From Hard and Decorative Chromium Electroplating and Chromium Anodizing Tanks (continued)	followed during malfunctions. [40 CFR 63.342(b)(1)]	(b) **RETAIN:** retain the O&M Plan for life of the 40 CFR 63 subpart N Affected Source, **OR** until the source is no longer subject to 40 CFR 63 subpart N. Previous versions of the O&M Plan shall be retained for 5 yrs (c) **IF:** a malfunction occurs, **AND** actions taken are inconsistent with the O&M Plan, **THEN:** • **RECORD:** the actual actions taken, **AND** • **REPORT:** by telephone [**DUE:** 2 working days after commencing the actions inconsistent with the plan], **AND** • **SUBMIT:** by written letter [**DUE:** 7 work days after the end of the event] (d) **IF:** a malfunction occurs which is inadequately addressed by the O&M Plan, **THEN REVISE:** the O&M Plan within 45 days of the malfunction event (4) **SUBMIT:** Semiannual Summary Report **DUE:** submit as part of the semi-annual Title V Periodic Monitoring Report **CONTENT:** according 40 CFR 63.347(g)(3) [40 CFR 63.347(g)(1)] (a) **IF:** more than one monitoring device is used to demonstrate compliance with the emission standards, **THEN REPORT**: the results for each monitoring device, **EXCEPT IF:** one monitoring device is a backup [40 CFR 63.347(g)(4)] (b) **IF:** an emission limit is exceeded, **THEN SUBMIT:** the Summary Report quarterly, until a request to reduce reporting frequency is approved according to 40 CFR 63.347(g)(2)	(a) Frequency: once per day that the corresponding affected source is operating [40 CFR 63.343(c)(1)(ii)] (b) The MACT Affected Source is in compliance with the standards if it is operating within ±1 inch H2O column of the pressure drop value established during its corresponding initial performance test, **OR** is operating within the range of compliant values for pressure drop established during multiple performance tests [40 CFR 63.343(c)(1)(ii)] (c) The monitoring device used to measure pressure drop across each composite mesh-pad [CMP] shall be installed to assure representative measurement, and shall be installed, operated, and calibrated according to manufacturer's written specifications, or equal. [40 CFR 63.344(d)(2)] (4) **RECORD:** each instance of maintenance of: (a) the affected source, **AND** (b) the CMP, **AND** (c) monitoring equipment [40 CFR 63.346(b)(2)] (5) **RECORD:** total process operating time for the reporting period [40 CFR 63.346(b)(11)] (6) **RECORD:** for each instance of a malfunction of the affected source which could reasonably result in failure to meet an emission standard and associated air pollution control devices and monitoring equipment: (a) the occurrence, duration, and cause (if known) (b) each specific period (date, time of start/end) of excess emissions (c) actions taken during malfunction **IF** inconsistent with the O&M plan (d) other records as needed to demonstrate

I. G. Process P08, S08, S34, S35, Control Device(s) C03, C04 — Chrome Plating Process-Installed 2003
Process P14, S14, Control Device(s) C02 — Chrome Plating Process-Installed 1996

Pollutant	a. Emission Limitations	b. Compliance Demonstration	c. Reference Test Methods, Recordkeeping and Monitoring Requirements
1. Chromium Emissions From Hard and Decorative Chromium Electroplating and Chromium Anodizing Tanks (continued)		**DUE:** submit as part of the of the corresponding semi-annual Title V Periodic Monitoring Reports and by April 30 [for the reporting period January 1 through March 30] and by October 30 [for the reporting period July 1 through September 30] [40 CFR 63.347(g)(1)(ii)]	consistency with the O&M Plan [40 CFR 63.346(b)(3)-(5), (9)-(10)] (7) **CONDUCT:** an initial performance test, according to 40 CFR 63.343(b)(1) and 40 CFR 63.7, as applicable. During the performance test, establish a site-specific operating parameter for pressure drop across the CMP which demonstrates compliance with the chromium emissions limit, according to 40 CFR 63.343(c)(1)(i). [Note: this requirement was completed by the permittee prior to issuance of this Title V operating permit.] [40 CFR 63.343(b)(1) and 40 CFR 63.343(c)(1)(i)]
2. Particulate Matter	(1) 0.33 pounds per hour for Process P08.[15] [03-JAJ-055, s. NR 404.08(2), and s. NR 415.05(2), Wis. Adm. Code] (2) 0.58 pounds per hour for Process P14.[16] [97-MMH-605, s. NR 404.08(2), and s. NR 415.05(2), Wis. Adm. Code] (3) Stack Parameters: These requirements are included because the source was reviewed with these stack parameters and it was determined that no increments or ambient air quality standards will be violated at these stack parameters.	(1) The chrome scrubber and composite mesh pad system (C03) for the chromium tank bath shall be in line and shall be operated at all times when process P08 is in operation. [s. NR 406.10 and s. NR 407.09(4)(a)1., Wis. Adm. Code] (2) The fabric filter (C04) for the Cladding Booth shall be in line and shall be operated at all times when process P08 is in operation.[17] [s. NR 406.10 and s. NR 407.09(4)(a)1., Wis. Adm. Code] (3) The composite mesh pad system (C02) for the chromium plate tank shall be in line and shall be operated at all times when process P14 is in operation. [s. NR 406.10 and s. NR 407.09(4)(a)1., Wis. Adm. Code] (4) Instrumentation to monitor the pressure drop across the composite mesh pad system (C02), chrome scrubber	(1) **REFERENCE TEST METHOD: PM** **IF:** emissions testing is requested by the Department for purposes of determining compliance with the PM emissions limit, **THEN:** use 5, 5A, 5B, 5D, 5E, 5F, 5G, 5H or 17 including condensible backhalf emissions (U.S. EPA Method 202). [s. NR 439.06(1), Wis. Adm. Code.] (2) The permittee shall keep and maintain on site technical drawings, blueprints or equivalent records of the physical stack parameters. [s. NR 439.04(1)(d), Wis. Adm. Code] (3) The permittee shall monitor the composite mesh pad system (C02), chrome scrubber and composite mesh pad system (C03), and fabric filter (C04) to ensure they are operating while processes P08 and P14 are operating. [s. NR 439.04(1)(d), Wis. Adm. Code]

[15] The 0.33 pounds per hour emission limit was established by modeling in construction permit 03-JAJ-055 and is included in the permit to protect the National Ambient Air Quality Standards (NAAQS). This emission limit is more restrictive than the allowable emission limit of 1.54 pounds per hour calculated from the process weight rate equation in s. NR 415.05(2), Wis. Adm. Code.

[16] The 0.58 pounds per hour emission limit was established by modeling in construction permit 03-JAJ-055 and is included in the permit to protect the National Ambient Air Quality Standards (NAAQS). This emission limit is more restrictive than the allowable emission limit in s. NR 415.05(2), Wis. Adm. Code.

[17] This condition applies to process P08 only. Process P14 is not equipped with a fabric filter to control emissions on the Cladding Booth.

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Process P14, S14, Control Device(s) C02 — Chrome Plating Process-Installed 1996

Pollutant	a. Emission Limitations	b. Compliance Demonstration	c. Reference Test Methods, Recordkeeping and Monitoring Requirements
2. Particulate Matter (continued)	(a) Stacks S14, S34, and S35 may not be equipped with a rainhat or other device which impedes the upward flow of the exhaust gases. [s. 285.65(3), Wis. Stats., and s. NR 406.10, Wis. Adm. Code]	and composite mesh pad system (C03), and fabric filter (C04) shall be installed and operated properly. [s. NR 439.055(1)(a), Wis. Adm. Code] (5) The pressure drop across the composite mesh pad system (C02), chrome scrubber and composite mesh pad system (C03), and fabric filter control device (CO4) shall be maintained, per manufacturer specifications, the malfunction, prevention, and abatement (MPA) plan required under I.J.4, or the most recent compliance test, within a range which will attain compliance with the emission limit given under I.I.2.a.(1). [s. NR 407.09(4)(a)1., Wis. Adm. Code]	(4) **RECORD:** pressure drop across the composite mesh pad system (C02), chrome scrubber and composite mesh pad system (C03), and fabric filter (C04) Frequency: at the beginning of each operating shift. [ss. NR 439.04(1)(d), s. NR 439.055(2)(b)1., and NR 407.09(1)(c), Wis. Adm. Code] (5) **RECORD:** each inspection, check, and any maintenance or repairs performed on the composite mesh pad system (C02), chrome scrubber and composite mesh pad system (C03), and fabric filter (C04), including the date and time of the action, initials of inspector, and the results. [ss. NR 439.04(1)(d), and NR 407.09(1)(c) Wis. Adm. Code] (6) **MAINTAIN:** the chrome scrubber and composite mesh pad system (C03) and the fabric filter (C04) pressure drop monitoring device for Process P08 in accordance with the manufacturer's recommendations, or equal, and calibrate at least once per year. [s. NR 439.11(1)(b) and s. NR 439.055(4), Wis. Adm. Code] (7) **MAINTAIN:** the composite mesh pad system (C02) pressure drop monitoring device for Process P14 in accordance with the manufacturer's recommendations, or equal, and calibrate at least once per year. [s. NR 439.11(1)(b) and s. NR 439.055(4), Wis. Adm. Code]
3. Visible Emissions	(1) 20% Opacity [s. NR 431.05, Wis. Adm. Code]	(1) The Compliance Demonstration requirements for chromium and particulate matter emissions, conditions under I.G.1.b. and I.G.2.b. are deemed sufficient to demonstrate compliance with the visible emission limit.	(1) **REFERENCE TEST METHOD: Visible Emissions** **IF:** emissions testing is requested by the Department for purposes of determining compliance with the visible emissions limit, **THEN:** use U.S. EPA Method 9, **OR:** other methods as approved by the Department. [s. NR 439.06(9)(a)1., Wis. Adm. Code] (2) The recordkeeping requirements for particulate matter emissions outlined in condition I.G.2.(c) also serve as

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Pollutant	a. Emission Limitations	b. Compliance Demonstration	c. Reference Test Methods, Recordkeeping and Monitoring Requirements
			recordkeeping requirements for visible emissions for processes P08 and P14. [s. NR 407.09(1)(c)1.a., Wis. Adm. Code]
4. Volatile Organic Compounds	(1) Latest Available Control Techniques and Operating Practices Demonstrating Best Current Technology (LACT) determined to be: (a) the following workpractice for process P08: [18] cleaning shall be performed using only isopropyl alcohol (IPA) which is applied to parts using squeegee bottles which are no larger than 1-liter in volume, and (b) no more than 475 1-liter squeegee bottles used per month, based on a 12-month rolling average, or an equivalent combination of bottles of different volume which results in VOC emissions of no more than 833 pounds per month, based on a 12-month rolling average (5.0 tons per year). [03-JAJ-054, s. NR 424.03(2)(c), Wis. Adm. Code, s. 285.65(3), Wis. Stats. and s. 285.65(7), Wis. Stats.] [NOTE: LACT is not required for P14 because VOC emissions were less than 15 lb/day at the time it was	(1) **CALCULATE**: monthly VOC emissions, for each chrome process line, within 10 days of the end of each calendar month. **PROCEDURE:** (a) Multiply the number of squeegee bottles used, as recorded at I.B.4.c.(2), by their respective volumes and by 1.76 [lb IPA per L], or equivalent factor which matches the units of measurement. (1) The average VOC content of all coatings and thinners used each month shall be determined using the following equation: $$\frac{\sum_i (V_i)\cdot(C_i)}{V_t} = \frac{\text{lb·VOC}}{\text{gal}}$$ where: i = Coating or thinner, i; $\sum_i (V_i)\cdot(C_i)$ = the sum of each quantity $(V_i)(C_i)$ for that month of operations V_i = the amount of each coating and thinners used	(1) **MAINTAIN:** on-site, a Material Safety Data Sheet (MSDS) or equivalent to document the VOC content of each cleanup solvent used [ss. NR 439.04(1) and 439.04(4), Wis. Adm. Code] (2) **RECORD:** (a) number of squeegee bottles used by each chrome process line, and the volume of bottles. (b) daily usage of coatings and solvents used, in gallons; (c) VOC content of each coating applied, in pounds per gallon, excluding water; (d) monthly volume of waste coatings and solvents, in gallons; (e) monthly average VOC content of all coatings and thinners used, as calculated in I.I.4.b.(1), in pounds per gallon excluding water; (f) The actual and average monthly VOC emissions determined at the end of each calendar month according to I.I.(4)b.(3) and (4). [s. NR 439.04(1)(d) and (3), Wis. Adm. Code] (3) **REFERENCE TEST METHOD: VOC** **IF:** emissions testing is requested by the Department for purposes of determining compliance with the VOC emissions limit, **THEN:** use US EPA Methods 24, 25, or 25A, **OR:** other methods as approved by the Department. [s. NR 439.06(3)(a), Wis. Adm. Code]

[18] It has been determined in construction permit 97-MMH-605 that daily VOC emissions from chrome plating process P14 do not exceed 15 pounds and that it is exempt from the requirements in ch. NR 424, Wis. Adm. Code.

I. G. Process P08, S08, S34, S35, Control Device(s) C03, C04 — Chrome Plating Process-Installed 2003
Process P14, S14, Control Device(s) C02 — Chrome Plating Process-Installed 1996

Pollutant	a. Emission Limitations	b. Compliance Demonstration	c. Reference Test Methods, Recordkeeping and Monitoring Requirements
4. Volatile Organic Compounds (continued)	permitted. VOC emissions from P14 along with VOC emissions from P08 are included in the VOC site cap of 249 tons/year.]	that month, in gallons; C_i = the VOC content for each coating and thinners used during that month, in pounds VOC per gallon, excluding water; V_t = the total volume of coatings and thinners used that month. [s. NR 407.09(4)(a)1., Wis. Adm. Code] (2) The VOCs from the waste solvent generated each month shall be determined by multiplying the total volume of waste solvent generated, in gallons, by the average VOC content of the coatings and solvents used that month, calculated in I.I.4.b.(1), in pounds VOC per gallon, excluding water. [s. NR 407.09(4)(a)1., Wis. Adm. Code] (3) **CALCULATE:** monthly VOC emissions, within 10 days of the end of each calendar month **PROCEDURE:** (a) calculate: daily VOC emissions by multiplying the amount of each coating used each day, in gallons, and the VOC content, in pounds per gallon, for that coating (b) sum daily emissions from each coating, to determine total VOC emissions for that day, and sum daily totals to determine the monthly total VOC emissions (c) subtract VOCs in the waste solvent generated for the month from the sum of daily emissions for that month, to determine total actual VOCs emitted that month (d) sum actual emissions from the most recent month and the actual emissions from the previous 11 consecutive months and divide by 12 to determine the average monthly emissions [s. NR 407.09(4)(a)1., Wis. Adm. Code]	

I. H. Process P09, Stack(s) S09, Control Device(s) C01 — Automated Spray Coating Line-Installed 1996

Pollutant	a. Emission Limitations	b. Compliance Demonstration	c. Reference Test Methods, Recordkeeping and Monitoring Requirements
1. Particulate Matter Emissions	(1) The most restrictive of 0.4 lb/1,000 lb of gas [s. NR 415.05(1)(o), Wis. Adm. Code] **AND** $E = 3.59 (P)^{0.62}$ where, E is the emission limit in pounds per hour, and P is the process weight rate in tons per hour.[19] [s. NR 415.05(2), Wis. Adm. Code]	(1) **INSTALL, OPERATE, AND MAINTAIN:** replaceable filters to control overspray from each paint booth [s. NR 407.09(4)(a)1., Wis. Adm. Code and s. 285.65(3), Wis. Stats.] (2) **USE:** replaceable filters at all times when the process P09 is operating [s. NR 407.09(4)(a)1., Wis. Adm. Code and s. 285.65(3), Wis. Stats.] (3) **INSPECT:** replaceable filters, to verify in place, and assure no hole or tear which may cause leaking Frequency: once during each day of operation [s. NR 407.09(4)(a)1., Wis. Adm. Code and s. 285.65(3), Wis. Stats.]	(1) **RECORD:** each visual inspection of the replaceable filters Frequency: daily [s. NR 439.04(1)(d), Wis. Adm. Code] (2) **REFERENCE TEST METHOD: PM** **IF:** emissions testing is requested by the Department for purposes of determining compliance with the PM emissions limit, **THEN:** use U.S. EPA Method 5 **AND** Method 202 to include condensable particulate matter emissions, **OR:** other methods as approved by the Department. [s. NR 439.06(1), Wis. Adm. Code.]
2. Visible Emissions	(1) 20% Opacity [s. NR 431.05, Wis. Adm. Code]	(1) See Particulate Matter Emission compliance demonstration requirements listed above.	(1) **REFERENCE TEST METHOD: Visible Emissions** **IF:** emissions testing is requested by the Department for purposes of determining compliance with the visible emissions limit, **THEN:** use U.S. EPA Method 9, **OR:** other methods as approved by the Department. [s. NR 439.06(9)(a)1., Wis. Adm. Code] (2) The recordkeeping requirements for particulate matter emissions outlined in condition I.H.1.c.(1) also serve as recordkeeping requirements for visible emissions for process P09. [s. NR 407.09(1)(c)1.a., Wis. Adm. Code]
3. Volatile Organic Compounds	(1) Latest Available Control Techniques and Operating Practices Demonstrating Best Current	(1) **INSTALL, CALIBRATE, OPERATE, AND MAINTAIN:** a device to monitor the pressure at the spray gun nozzle of the HVLP application system [s. NR	(1) **MAINTAIN:** on-site, a Material Safety Data Sheet (MSDS) or equivalent to document the VOC content of each raw material that is used in Process P09 [ss. NR

[19] Because the process weight rate equation varies depending on production and customer demand, both limits from ss. NR 415.05(1)(o), Wis. Adm. Code and NR 415.05(2), Wis. Adm. Code have been included to ensure that appropriate particulate limit is applied to process P09. Based on the permit review information for 95-MMH-616, the allowable emission rate was 0.32 pounds per hour for the spray booth in process P09.

I. H. Process P09, Stack(s) S09, Control Device(s) C01 — Automated Spray Coating Line-Installed 1996

Pollutant	a. Emission Limitations	b. Compliance Demonstration	c. Reference Test Methods, Recordkeeping and Monitoring Requirements
(VOC)	Technology (LACT) is determined to be the following: apply coatings using high volume low pressure (HVLP) systems. [95-MMH-616, s. NR 424.03(2)(c), Wis. Adm. Code, and s. 285.65(7), Wis. Stats.] (2) Volatile organic compound emissions from the automated spray booth process P09 shall not exceed 2,337 lb/month of VOC, averaged over 12 months.[20] [95-MMH-616-R1 and s. 285.65(7), Wis. Stats.]	439.055(1), Wis. Adm. Code] (2) **LIMIT:** air pressure at the spray gun nozzle of the HVLP application system to 10 psi or less [s. 285.65(3), Wis. Stats.] (3) **DEMONSTRATE:** To calculate the average monthly VOC emissions from the automated spray booth process P09, use the following equations, except as may be otherwise approved by the Wisconsin DNR: (a) For the past months emissions: $E=\sum_{i}(V_i)\cdot(C_i)$ where: i = identifies each individual coating; E = total monthly emissions of VOCs from coating usage, in pounds per month; $\sum_{i}(V_i)\cdot(C_i)$ = the sum of each quantity of $(V_i)(C_i)$ for each coating used in the previous month; V_i = total volume of coating i, as a sum from the previous month, in gallons, less water, as applied C_i = the VOC content of coating i, in pounds per gallon, less water, as applied (b) The facility shall calculate the average using the following equation:	439.04(1) and 439.04(4), Wis. Adm. Code] (2) **MEASURE AND RECORD:** spray gun nozzle pressure Frequency: monthly [s. NR 439.055(5), Wis. Adm. Code and s.285.65(3), Wis. Stats.] (3) **USE AND HANDLE:** organic compounds according to good operating practices, including taking reasonable precautions to prevent the spillage, escape or emission of organic compounds, solvents or mixtures. Such precautions shall include, but not be limited to covering clean-up solvent cans when not in use. [s. NR 419.03(2), Wis. Adm. Code] (4) **REFERENCE TEST METHOD: VOC** **IF:** emissions testing is requested by the Department for purposes of determining compliance with the VOC emissions limit, **THEN:** use US EPA Methods 18, 25, 25A or 25B, **OR:** other methods as approved by the Department. [s. NR 439.06(3)(a), Wis. Adm. Code] (5) **RECORD:** The following records for automated spray booth process P09 shall be maintained during operation: (a) Daily usage (in gallons) and VOC content (in pounds per gallon) of coatings and solvents used at the coating line; (b) The VOC content of each coating applied, in pounds per gallon, excluding water; (c) The actual and average VOC emissions determined at the end of each calendar month according to I.H.(2).b.(3) and (4). [s. NR 439.04(1)(d) and (3), Wis. Adm. Code]

[20] The VOC limit of 2,337 lb/month of VOC, averaged over 12 months, is equivalent to the individual coating usage limits established in construction permit 95-MMH-616-R1.

I. H. Process P09, Stack(s) S09, Control Device(s) C01 — Automated Spray Coating Line-Installed 1996

Pollutant	a. Emission Limitations	b. Compliance Demonstration	c. Reference Test Methods, Recordkeeping and Monitoring Requirements
3. Volatile Organic Compounds (VOC) (continued)		$E_{avg} = \frac{(E_1 + E_2 + .. + E_i)}{n}$ where: E_{avg} = Average monthly emissions, as an average over the previous 12 consecutive month period; E_i = Actual emissions, in month i; n = the number of months within the previous consecutive 12 months that the facility operated, not to exceed 12. (c) These calculations shall be completed within 10 working days of the end of each calendar month to determine the average usage for that previous month. [s. NR 407.09(4)(a)1., Wis. Adm. Code] (4) **DEMONSTRATE:** The monthly VOC emission averages from the automated spray booth process P09 required in I.H.(2).b.(3), shall be calculated by: (a) Sum the daily usage of coating or solvent over the calendar month in which it is used to get the monthly emissions; (b) For the first month after permit issuance the average is the monthly emissions; (c) After the second month after permit issuance, the average is calculated by summing the monthly emissions for the two previous months and dividing by two; (d) After the third month after permit issuance, the average is calculated by summing the monthly emissions for the three previous months and dividing	

I. H. Process P09, Stack(s) S09, Control Device(s) C01 — Automated Spray Coating Line-Installed 1996

Pollutant	a. Emission Limitations	b. Compliance Demonstration	c. Reference Test Methods, Recordkeeping and Monitoring Requirements
3. Volatile Organic Compounds (VOC) (continued)		by three; (e) The average is calculated in this manner until the 12th month. After the 12th month and beyond, the average is calculated by summing the monthly emissions for the previous 12 months and dividing by 12; (f) Each result may not exceed the values given in I.H.(2).a.(2). [ss. 285.65(7), Wis. Stats., and NR 407.09(4)(a)1., Wis. Adm. Code]	

I. I. Ceramic Fiber Making Processes
Process P15, Control Device C05, Stack(s) S15, S25, S43, S44, S45 - CF1-Last Modified 2004
Process P16, Control Device C05, Stack(s) S16, S26, S43, S44, S46 - CF2-Last Modified 2004
Process P17, Stack(s) S17, S27, S30 - CF3-Last Modified 2004
Process P18, Stack(s) S18, S28 - CF4-Last Modified 2004
Process P19, Control Device C05, Stack(s) S19, S29, S30, S43, S47 - CF5-Last Modified 2004
Process P22, Control Device C05, Stack(s) S41, S42, S43, S44, S48 - CF6-Last Modified 2004

Pollutant	a. Emission Limitations	b. Compliance Demonstration	c. Reference Test Methods, Recordkeeping and Monitoring Requirements
1. Formaldehyde	(1) Combined emissions from all the ceramic fiber making processes: 166 pounds per month, averaged over each 12 consecutive month period.[21] [03-JAJ-240, ss. NR 445.05(3)(b), Wis. Adm. Code, and 285.65(7), Wis. Stats.] (2) Formaldehyde emissions from processes P15 (CF1), P16 (CF2), P19 (CF5), and P22 (CF6) shall be controlled by at least 41%, on average, between all process lines [P15, P16, P19, and P22] while using the worst case raw material family of fibers.[29] [03-JAJ-240, ss. NR 445.05(3)(b), Wis. Adm. Code, and 285.65(7) Wis. Stats.]	(1) **CALCULATE:** formaldehyde (HCOH) emissions from the ceramic fiber making lines **FREQUENCY:** each month **HOW:** HCOH = [EF_1 x pounds typical raw material] + [EF_2 x pounds worst case material] Where EF_1 is the emission factor for formaldehyde derived from the most recent tests the facility has conducted for emissions of the typical raw material family of fibers. EF_2 is the emission factor for formaldehyde derived from the most recent tests the facility has conducted for emissions of the worst case raw material family of fibers. [s. NR 407.09(4)(a)1., Wis. Adm. Code] (2) **CALCULATE:** formaldehyde emissions from all ceramic fiber making processes, averaged over each 12 consecutive month period **FREQUENCY:** each month **DUE:** within 7 calendar days of the end of each month **HOW:** by dividing the total formaldehyde emissions of all ceramic fiber making processes during the previous 12 consecutive month period period by 12	(1) **RECORD:** for each month of operation: (a) amount (lbs) of each raw material used in the ceramic fiber making processes; (b) formaldehyde emissions [lb/day] from all ceramic fiber making processes; (c) formaldehyde emissions [lb/mo] from all ceramic fiber making processes, calculated according to condition I.A.1.b.(1); and (d) formaldehyde emissions from all ceramic fiber making processes averaged over each 12 consecutive month period, calculated according to condition I.A.1.b.(2). (e) the date, time, and process number, when a process is operating using the worst case raw materials. [s. NR 439.04(d), Wis. Adm. Code] (2) **RECORD:** all inspections, checks, calibrations and any maintenance or repairs performed on the oxidizer **CONTENT:** the date of the action, initials of inspector, and the results [s. NR 439.04(1)(d), Wis. Adm. Code] (3) **CALIBRATE:** the temperature monitoring device

[21] The formaldehyde limit of 166 pounds per month was established in construction permit 03-JAJ-240 to meet the BACT requirement.

I. I. Ceramic Fiber Making Processes

Process P15, Control Device C05, Stack(s) S15, S25, S43, S44, S45 - CF1-Last Modified 2004
Process P16, Control Device C05, Stack(s) S16, S26, S43, S44, S46 - CF2-Last Modified 2004
Process P17, Stack(s) S17, S27, S30 - CF3-Last Modified 2004
Process P18, Stack(s) S18, S28 - CF4-Last Modified 2004
Process P19, Control Device C05, Stack(s) S19, S29, S30, S43, S47 - CF5-Last Modified 2004
Process P22, Control Device C05, Stack(s) S41, S42, S43, S44, S48 - CF6-Last Modified 2004

Pollutant	a. Emission Limitations	b. Compliance Demonstration	c. Reference Test Methods, Recordkeeping and Monitoring Requirements
1. Formaldehyde (continued)		[s. NR 407.09(4)(a)1., Wis. Adm. Code] (3) **OPERATE:** the oxidizer (C05) control device when processes P15 (CF1), P16 (CF2), P19 (CF5), and P22 (CF6) are operating and using worst case raw materials (4) **MAINTAIN AND OPERATE:** temperature in the primary chamber of the the oxidizer (C05): as needed to meet all applicable requirements under this section as determined by most recent compliance test. [s. NR 439.055(1)(d) and s. NR 407.09(4)(a)1., Wis. Adm. Code] (5) **INSTALL, OPERATE, CALIBRATE, AND MAINTAIN:** a continuous monitoring device for the primary chamber temperature **ACCURRACY:** 0.5% of the temperature being measured [s. NR 439.055(2)(a), s. NR 407.09(4)(a)1., and s. NR 439.055(3)(a), Wis. Adm. Code] (6) **PERFORM:** compliance emission tests **DUE:** within 180 days after the start of initial operation of process line CF6 (P22) **HOW:** determine the following, while operating at 100% capacity, for each process line: P15 (CF1), P16 (CF2), P19 (CF5), and P22 (CF6): (a) Formaldehyde emission rate, for each process line P15 (CF1), P16 (CF2), P19 (CF5), and P22 (CF6);	of the thermal oxidizer, at least once per year [s. NR 439.055(4), Wis. Adm. Code] (4) **RECORD:** temperature in the primary chamber of the oxidizer **FREQUENCY:** at least every 15 minutes [ss. NR 439.055(2)(a), Wis. Adm. Code, and NR 407.09(1)(c), Wis. Adm. Code] (5) **RECORD:** for all testing completed to obtain the emission factors used under condition I.A.1.b.(1): (a) date, monitoring site, and time and duration of sampling, testing, monitoring and measurements; (b) dates the analyses were performed; (c) the company or entity that performed the analyses; (d) the analytical techniques or methods used, including supporting information such as calibration and maintenance records and all original recording charts for continuous monitoring instrumentation including emissions or equipment monitors; (e) the resulting emission factor(s); (f) the relevant operating conditions that existed at the time of sampling, testing, monitoring or measurement, such as the type and throughput of material used in each process line. [s. NR 439.04(1)(a), Wis. Adm. Code, and s. 285.65(10),

I. I. Ceramic Fiber Making Processes
Process P15, Control Device C05, Stack(s) S15, S25, S43, S44, S45 - CF1-Last Modified 2004
Process P16, Control Device C05, Stack(s) S16, S26, S43, S44, S46 - CF2-Last Modified 2004
Process P17, Stack(s) S17, S27, S30 - CF3-Last Modified 2004
Process P18, Stack(s) S18, S28 - CF4-Last Modified 2004
Process P19, Control Device C05, Stack(s) S19, S29, S30, S43, S47 - CF5-Last Modified 2004
Process P22, Control Device C05, Stack(s) S41, S42, S43, S44, S48 - CF6-Last Modified 2004

Pollutant	a. Emission Limitations	b. Compliance Demonstration	c. Reference Test Methods, Recordkeeping and Monitoring Requirements
1. Formaldehyde (continued)		(b) Formaldehyde destruction efficiency of the oxidizer, for each process line P15 (CF1), P16 (CF2), P19 (CF5), and P22 (CF6); (c) The average formaldehyde destruction efficiency of the oxidizer for all process lines P15 (CF1), P16 (CF2), P19 (CF5), and P22 (CF6) combined. (d) Temperature of the primary chamber to attain and maintain at least 41% control of formaldehyde emissions. [s. NR 439.07, Wis. Adm. Code] (7) **INSPECT:** the thermal oxidation system **HOW:** according to the Malfunction, Prevention and Abatement Plan . **FREQUENCY:** monthly [ss. NR 439.04(1)(d), and NR 407.09(1)(c), Wis. Adm. Code]	Wis. Stats.] (6) **REFERENCE TEST METHOD: Formaldehyde** Whenever emissions testing is required for purposes of determining compliance with the formaldehyde emissions limit, use US EPA Method 0011, **OR:** other method as approved by the Department. [s. NR 439.06(8), Wis. Adm. Code]
2. Volatile Organic Compounds	(1) Latest Available Control Techniques and operating practices demonstrating best current technology (LACT): The permittee has demonstrated that 85% control is technologically infeasible for the all process lines combined, and so shall use LACT. LACT is defined as:[22]	(1) **CALCULATE:** VOC emissions from the ceramic fiber making lines each month as follows: VOC = [EF_1 x pounds typical raw material] + [EF_2 x pounds worse case raw material] Where EF_1 is the emission factor for volatile organic compounds derived from the most recent tests the	(1) **RECORD:** for each month of operation: (a) amount (lbs) of each raw material used in the ceramic fiber making processes; (b) VOC emissions [lb/month] from all ceramic fiber making processes, calculated according to condition I.A.1.b.(1); and (c) VOC emissions from all ceramic fiber making

[22] This LACT determination was established in construction permit 03-JAJ-240.

I. I. Ceramic Fiber Making Processes
Process P15, Control Device C05, Stack(s) S15, S25, S43, S44, S45 - CF1-Last Modified 2004
Process P16, Control Device C05, Stack(s) S16, S26, S43, S44, S46 - CF2-Last Modified 2004
Process P17, Stack(s) S17, S27, S30 - CF3-Last Modified 2004
Process P18, Stack(s) S18, S28 - CF4-Last Modified 2004
Process P19, Control Device C05, Stack(s) S19, S29, S30, S43, S47 - CF5-Last Modified 2004
Process P22, Control Device C05, Stack(s) S41, S42, S43, S44, S48 - CF6-Last Modified 2004

Pollutant	a. Emission Limitations	b. Compliance Demonstration	c. Reference Test Methods, Recordkeeping and Monitoring Requirements
2. Volatile Organic Compounds (continued)	a. The following raw material usage limits to the 3M ceramic fiber maker processes: 1. CF1 = 48 lb raw material per hour; 2. CF2 = 48 lb raw material per hour; 3. CF3 = 32 lb raw material per hour; 4. CF4 = 16 lb raw material per hour; 5. CF5 = 48 lb raw material per hour; and 6. CF6 = 96 lb raw material per hour. b. VOC emissions shall not exceed 13,500 pounds per month averaged over each 12 consecutive month period. c. Control of VOC emissions from processes P15 (CF1), P16 (CF2), P19 (CF5), and P22 (CF6) during the use of worst case raw materials, with a	facility has conducted for emissions of the typical raw material family of fibers. EF_2 is the emission factor for volatile organic compounds derived from the most recent tests the facility has conducted for emissions of the worse case raw material family of fibers. [s. NR 407.09(4)(a)1., Wis. Adm. Code] (2) **CALCULATE:** VOC emissions from all ceramic fiber making processes, averaged over each 12 consecutive month period **FREQUENCY:** each month **DUE:** within 7 calendar days of the end of each month **HOW:** by dividing the total VOC emissions of all ceramic fiber making processes during the previous 12 consecutive month period period by 12 [s. NR 407.09(4)(a)1., Wis. Adm. Code] (3) **OPERATE:** the oxidizer (C05) control device when processes P15 (CF1), P16 (CF2), P19 (CF5), and P22 (CF6) are operating and using worst case raw materials (4) **MAINTAIN:** temperature in the primary chamber of the the oxidizer (C05): as needed to meet all applicable requirements under this section as determined by most recent compliance test. [s. NR 439.055(1)(d) and s. NR 407.09(4)(a)1., Wis. Adm. Code] (5) **INSTALL, OPERATE, CALIBRATE, AND MAINTAIN:** a continuous monitoring device for the primary chamber temperature **ACCURRACY:** 0.5% of the temperature being	processes averaged over each 12 consecutive month period, calculated according to condition I.A.1.b.(2). (d) the date, time, and process number, when a process is operating using the worst case raw materials. [s. NR 439.04(d), Wis. Adm. Code] (2) **RECORD:** for all testing completed to obtain the emission factors used under condition I.A.1.b.(1): (a) date, monitoring site, and time and duration of sampling, testing, monitoring and measurements; (b) dates the analyses were performed; (c) the company or entity that performed the analyses; (d) the analytical techniques or methods used, including supporting information such as calibration and maintenance records and all original recording charts for continuous monitoring instrumentation including emissions or equipment monitors; (e) the resulting emission factor(s); (f) the relevant operating conditions that existed at the time of sampling, testing, monitoring or measurement, such as the type and throughput of material used in each process line. [s. NR 439.04(1)(a), Wis. Adm. Code, and s. 285.65(10), Wis. Stats.]

I. I. Ceramic Fiber Making Processes
Process P15, Control Device C05, Stack(s) S15, S25, S43, S44, S45 - CF1-Last Modified 2004
Process P16, Control Device C05, Stack(s) S16, S26, S43, S44, S46 - CF2-Last Modified 2004
Process P17, Stack(s) S17, S27, S30 - CF3-Last Modified 2004
Process P18, Stack(s) S18, S28 - CF4-Last Modified 2004
Process P19, Control Device C05, Stack(s) S19, S29, S30, S43, S47 - CF5-Last Modified 2004
Process P22, Control Device C05, Stack(s) S41, S42, S43, S44, S48 - CF6-Last Modified 2004

Pollutant	a. Emission Limitations	b. Compliance Demonstration	c. Reference Test Methods, Recordkeeping and Monitoring Requirements
2. Volatile Organic Compounds (continued)	control efficiency of at least 80%, on average, between all process lines controlled. [03-JAJ-240, s. NR 424.03(2)(c), Wis. Adm. Code, and s. 285.65(7), Wis. Stats.]	measured [s. NR 439.055(2)(a), s. NR 407.09(4)(a)1., and s. NR 439.055(3)(a), Wis. Adm. Code] (6) **PERFORM:** compliance emission tests **DUE:** within 180 days after the start of initial operation of process line CF6 (P22) **HOW:** determine the following, while operating at 100% capacity, for each process line: P15 (CF1), P16 (CF2), P19 (CF5), and P22 (CF6): (a) VOC emission rate, for each process line P15 (CF1), P16 (CF2), P19 (CF5), and P22 (CF6); (b) VOC destruction efficiency of the oxidizer, for each process line P15 (CF1), P16 (CF2), P19 (CF5), and P22 (CF6); (c) The average VOC destruction efficiency of the oxidizer for all process lines P15 (CF1), P16 (CF2), P19 (CF5), and P22 (CF6) combined. (d) Temperature of the primary chamber to attain and maintain at least 80% control of formaldehyde emissions. [s. NR 439.07, Wis. Adm. Code]	(3) **REFERENCE TEST METHOD: VOC Emissions** **IF:** emissions testing is requested by the Department for purposes of determining compliance with the VOC emissions limit, **THEN:** use US EPA Methods 18, 25, 25A or 25B, **OR:** other methods as approved by the Department. [s. NR 439.06(3)(a), Wis. Adm. Code] (4) **REFERENCE TEST METHOD: VOC Content of Coatings** The organic solvent content, volume of solids, weight of solids, water content, and density of surface coatings and inks, as may be needed to calculate VOC emissions, may be determined on the basis of coating formulations and Material Safety Data Sheets (MSDS) or equivalent. **IF:** requested by the Department in connection with a compliance demonstration for VOC emissions, **THEN:** use U.S. EPA Method 24 or 24A, **OR:** other methods as approved by the Department. [s. NR 439.06(3)(b), Wis. Adm. Code]

I. J. CONDITIONS THAT APPLY TO THE TOTAL FACILITY

Pollutant	a. Limitations	b. Compliance Demonstration	c. Reference Test Methods, Recordkeeping and Monitoring Requirements
1. Synthetic Minor Provision for PSD	(1) The VOC emissions from all emissions units at the permittee's site location may not exceed 20.75 tons per month, averaged over any 12 consecutive months.[23] [617056660-P01, 04-SJZ-142, s. 285.65(7), Wis. Stats.]	(1) Emission factor data, weight percent of VOCs, density of coating used, amount of VOCs per gallon of coating, or any other information necessary shall be used to calculate VOC emissions. [s. NR 407.09(4)(a)1., Wis. Adm. Code] (2) The monthly amount of VOC emissions shall be calculated according to I.F.1.b.(8), I.G.4.b.(1), I.G.4.b.(2), I.G.4.b.(3), I.H.3.b.(3), I.H.3.b.(4), I.I.2.b.(1), I.I.2.b.(2), and conditions in Part III.K.1. of this operation permit. [s. NR 407.09(4)(a)1., Wis. Adm. Code] (3) The average monthly amount of all VOC emissions shall be calculated by summing the emissions of the current month with those of the preceding 11 months, and dividing by 12 using the following equation: $\mathbf{E_{total}} = 3\mathbf{X_n/12}$ where, $\mathbf{E_{total}}$ = average tons of all VOC emitted in a month; $\mathbf{X_n}$ = tons of VOC emissions in a month as calculated in condition I.J.1.b.(2). [s. NR 407.09(4)(a)1., Wis. Adm. Code]	(1) The following monthly records shall be compiled by the 15th day after the end of the month: (a) an unique name or identification number for each raw material that contains VOCs (b) monthly usage of each raw material containing VOCs in gallons; (c) VOC content in each raw material in pounds per gallon; (d) calculation of VOCs emitted in tons per month; (e) sum of all VOCs emitted in tons per month; (f) average of all VOCs emitted from the entire facility in tons per month as averaged over the last 12 consecutive months. [ss. NR 439.04 and NR 407.09(4)(a)1., Wis. Adm. Code] (2) The averages in conditions I.J.(1)c.(1)(f) shall be calculated for the facility by summing the tons from the last "n" months and dividing the result by "n" to yield the monthly average for total VOCs. The integer number "n" is the number of months (not to exceed 12). Once 12 months have passed, the facility shall continue to use n=12 along with the last 12 consecutive months' tonnage in calculating the monthly averages. This shall be used to determine compliance with the synthetic minor condition. [ss. NR 439.04 and NR 407.09(4)(a)1., Wis. Adm. Code]

[23] The VOC emissions limit of 20.75 tons per month, averaged over any 12 consecutive months, was established in construction permit 04-SJZ-142 and operation permit 617056660-P01 and is always in effect regardless if the Environmental Cooperative Agreement is in effect or not.

I. J. TOTAL FACILITY

CONDITION TYPE	a. SPECIFIC CONDITIONS	b. Compliance Demonstration
2. Stack Parameters	(1) The 3M facility in Menomonie, Wisconsin is located in a Minor New Source Review (NSR) Baseline County (Dunn County), with a base line year of 1990. The permittee has performed a dispersion model for facility-wide emissions of PM, SOx, and NOx and demonstrated that the ambient concentration of each of these substances resulting from emissions units installed at the 3M plant subsequent to the year 1990, plus emissions units installed within 2 km of the 3M plant, does not exceed the corresponding PSD increment. As of the date of issuance of this Title V operating permit, the following emissions units were installed after 1990 and are included for analysis: • P01, S01: 21 million BTU/hr Kewaunee Boiler-Installed 1996 • P06, S06, S36: MRC 5 Coating Line-Installed 2003 • P08, S08, S34, S35, C03, C04: Chrome Plating Process #2-Installed 2003 • P09, S09, C01: Automated Spray Coating Line-Installed 1996 • P10, S10, S20: MRC-1 Coating Line-Installed 1994, Last Modified 2000 • P11, S11, S21: MRC-2 Coating Line- Installed 1995, Modified 2000 • P12, S12: MRC-3 Coating Line- Installed 1994, Modified 2000 • P13, S13, S23: MRC-4 Coating Line-Installed 2000 • P14, S14, C02: Chrome Plating Process-Installed 1996 • P15, S15, S25, S43, S44, S45, C05: CF1 Ceramic Fiber Making Process-Installed 1991, Last Modified 2004 • P16, S16, S26, S43, S44, S46, C05: CF2 Ceramic Fiber Making Process-Installed 1991, Last Modified 2004 • P17, S17, S27, S30: CF3 Ceramic Fiber Making Process- Installed 1994, Last Modified 2004	None

I. J. TOTAL FACILITY

CONDITION TYPE	a. SPECIFIC CONDITIONS	b. Compliance Demonstration
2 Stack Parameters (continued)	• P18, S18, S28: CF4 Ceramic Fiber Making Process- Installed 1986, Last Modified 2004 • P19, S19, S29, S30, S43, S47, C05: CF5 Ceramic Fiber Making Process- Installed 1989, Last Modified 2004 • P20, S31, S32, S33: Gamma Line-Installed 2004 • P21, S50, S51, S52, S53: MRC 6-Installed 2004 • P22, S40, S41, S42, S43, S48, C05: CF6 Ceramic Fiber Firing-Installed 2004 (2) All stack parameters shall be maintained at dimensions where emissions met the National Ambient Air Quality Standards (NAAQS) during the most recent modeling analysis. [ss. 285.63(1)(a) and 285.65(3), Wis. Stats.] (3) The permittee shall keep and maintain on site technical drawings, blueprints or equivalent records of the physical stack parameters. [s. NR 439.04(1)(d), Wis. Adm. Code]	
3. Malodorous Emissions	(1) The facility shall not emit into the ambient air any substance or combination of substances in such quantities that an objectionable odor is determined to result unless preventative measures satisfactory to the department are taken to abate or control such emissions. [s. NR 429.03(1), Wis. Adm. Code]	None
4. Malfunction Prevention and Abatement Plan	(1) A malfunction prevention and abatement plan shall be prepared and followed for the facility within 90 days after this permit is issued. [s. NR 439.11, Wis. Adm. Code] (2) A written copy of the plan shall be kept at the plant and shall be updated once every five years. [s. NR 439.11(1), Wis. Adm. Code] (3) All air pollution control equipment shall be operated and maintained in conformance with good engineering practices (i.e., operated and maintained according to the manufacturer's specifications and procedures) to minimize the possibility for the exceedance of any emission limitations. [s. NR 439.11(4), Wis. Adm. Code]	None

I. J. TOTAL FACILITY

CONDITION TYPE	a. SPECIFIC CONDITIONS	b. Compliance Demonstration
4. Malfunction Prevention and Abatement Plan (continued)	(4) The plan shall be developed to prevent, detect and correct malfunctions or equipment failures which may cause any applicable emissions limitation to be violated or which may cause air pollution. [s. NR 439.11(1), Wis. Adm. Code] (5) This plan shall include installation, maintenance and routine calibration procedures for the control equipment instrumentation. This plan shall require an instrumentation calibration at the frequency specified by the manufacturer but not less than once per year plus an inspection and/or calibration whenever instrumentation anomalies are noted. [ss. NR 407.09(1)(c)1.c., NR 439.055(4) and s. NR 439.11, Wis. Adm. Code] (6) The plan shall require a copy of the operation and maintenance manual for the control equipment be maintained on site. The plan shall contain all of the elements in s. NR 439.11(1)(a) - (h), Wis. Adm. Code. [s. NR 439.11, Wis. Adm. Code] (7) The facility shall maintain an inventory of normal consumable items necessary to ensure operation of the control device in conformance with the manufacturer's specifications and recommendations. [s. NR 439.11, Wis. Adm. Code]	
5. Compliance Report / Records	(a) The permittee shall submit periodic monitoring reports. [s. NR 407.09(1)(c)3., Wis. Adm. Code] (b) The permittee shall submit periodic compliance certification. [s. NR 407.09(4)(a)3., Wis. Adm. Code] (c) The records required under this permit shall be retained for at least five years and shall be made available to department personnel upon request during normal business hours. [s. NR 422.127(4)(d), s. NR 439.04, and s. NR 439.05, Wis. Adm. Code]	(1) **SUBMIT:** Semi-annual Monitoring Summary Report **CONTENT:** a summary of the monitoring required by this permit, as described at item D. of Part II of this operation permit, including: Identify all deviations • fuel oil certifications or other evidences of the sulfur content of fuel oil burned by process P01 [21 Million BTU/hr Kewaunee Boiler] • The Semi-annual Compliance Report under MACT JJJJ, as noted at I.F.1.c • The Semi-annual Summary Report under MACT N, as noted at I.H.1.b (or the alternating quarterly report, if required in lieu of the semi-annual report, according to I.H.1.b.(4)(b)

I. J. TOTAL FACILITY

CONDITION TYPE	a. SPECIFIC CONDITIONS	b. Compliance Demonstration
5. Compliance Report / Records (continued)		**DUE:** February 15 for the reporting period of July 1 through December 31 of the preceding year, and August 15 for the reporting period of the preceding January 1 through June 30, for each year that this permit is in effect **SEND TO:** Wisconsin Department of Natural Resources, West Central Region Air Program – Baldwin Service Center, 990 Hillcrest, Suite 104, Baldwin, Wisconsin 54002, phone 715-684-2914, , [s. NR 439.03(1)(b), Wis. Adm. Code] (2) **SUBMIT:** Certification of Compliance **CONTENT:** item N. of Part II of this operation permit **DUE:** due February 15 for the period from January 1 to December 31, each year that this permit is in effect **SEND TO:** Wisconsin Department of Natural Resources, West Central Region Air Program – Baldwin Service Center, 990 Hillcrest, Suite 104, Baldwin, Wisconsin 54002, phone 715-684-2914 and to U.S. EPA at Compliance Data - Wisconsin, Air and Radiation Division, U.S.EPA, 77 W. Jackson, Chicago, IL 60604 [s. NR 439.03(1)(c), Wis. Adm. Code]

PART II
GENERAL PERMIT CONDITIONS
FOR DIRECT STATIONARY SOURCES

II. A. Scope

This permit is valid only for the structure, building, facility, equipment or operation specifically identified herein. All emissions authorized hereby shall be in compliance with the terms and conditions of Parts I, II, and III of this permit. (s. 285.60(7), Wis. Stats.)

II. B. Emissions Prohibited

Unless the Department has approved an exception under s. NR 436.03(2), no person may cause, allow, or permit emissions of any air contaminant into the ambient air in excess of the limits set in chs. NR 400 to 499, Wis. Adm. Code. (s. NR 436.03(1), Wis. Adm. Code)

II. C. General Emission Limits[24]

1. No person may cause, allow, or permit particulate matter to be emitted into the ambient air which substantially contributes to exceeding of an air standard, or creates air pollution. (s. NR 415.03, Wis. Adm. Code).

2. No person may cause, allow, or permit any materials to be handled, transported, or stored without taking precautions to prevent particulate matter from becoming airborne. Nor may a person allow a structure, a parking lot, or a road to be used, constructed, altered, repaired, sand blasted or demolished without taking such precautions. Such precautions shall include, but not be limited to the following (s. NR 415.04, Wis. Adm. Code):

    a. Use, where possible, of water or chemicals for control of dust in the demolition of existing buildings or structures, or construction operations.

    b. Application of asphalt, oil, water, suitable chemicals, or plastic covering on dirt roads, material stockpiles, and other surfaces which can create airborne dust, provided such application does not create a hydrocarbon, odor, or water pollution problem.

    c. Installation and use of hoods, fans and air cleaning devices to enclose and vent the areas where dusty materials are handled.

    d. Covering or securing of materials likely to become airborne while being moved on public roads, railroads, or navigable waters.

    e. Conduct of agricultural practices such as tilling of land or application of fertilizers in such manner as not to create air pollution.

    f. The paving or maintenance of roadway areas so as not to create air pollution.

3. No person may cause, allow or permit emission of sulfur or sulfur compounds into the ambient air which substantially contribute to the exceeding of an air standard or cause air pollution. (s. NR 417.03, Wis. Adm. Code).

[24] The facility shall determine the compliance testing, monitoring, reporting and recordkeeping requirements sufficient to assure compliance with the general emission limits, in accordance with NR 407.09(4)(a)1. of the Wis. Adm. Code.

4. No person may cause, allow or permit organic compound emissions into the ambient air which substantially contribute to the exceeding of an air standard or cause air pollution. No person may cause, allow or permit organic compounds to be used or handled without using good operating practices and taking reasonable precautions to prevent the spillage, escape or emission of organic compounds, solvents or mixtures. (s. NR 419.03, Wis. Adm. Code).

5. No person may cause, allow or permit the disposal of more than 5.7 liters (1.5 gallons) of any liquid Volatile Organic Compound (VOC) waste, or of any liquid, semisolid or solid waste materials containing more than 5.7 liters (1.5 gallons) of any VOC, in any one day from a facility in a manner that would permit their evaporation into the ambient air during the ozone season. This includes, but is not limited to, the disposal of VOC which must be removed from VOC control devices so as to maintain the control devices at their required operating efficiency. Disposal during the ozone season shall be by methods approved by the Department, such as incineration, recovery for reuse, or transfer in closed containers to an acceptable disposal facility, such that the quantity of VOC which evaporates into the ambient air does not exceed 15% (by weight) or 5.7 liters (1.5 gallons) in any one day, whichever is larger. (s. NR 419.04, Wis. Adm. Code).

6. No person may cause, allow or permit emissions of carbon monoxide to the ambient air which substantially contribute to the exceeding of an air standard or cause air pollution. (s. NR 426.03, Wis. Adm. Code).

7. No person may cause, allow or permit emissions into the ambient air of lead or lead compounds which substantially contribute to the exceeding of an air standard or air increment, or which create air pollution. (s. NR 427.025, Wis. Adm. Code).

8. No person may cause, allow, or permit nitrogen oxides or nitrogen compounds to be emitted to the ambient air which substantially contribute to the exceeding of an air standard or cause air pollution. (s. NR 428.03, Wis. Adm. Code).

9. No person may cause, allow or permit emission into the ambient air of any substance or combination of substances in such quantities that an objectionable odor is determined to result unless preventive measures satisfactory to the Department are taken to abate or control such emission. (s. NR 429.03(1), Wis. Adm. Code*)

10. Open burning is prohibited except as provided in s. NR 429.04, Wis. Adm. Code. (s. NR 429.04, Wis. Adm. Code*)

11. No person may cause, allow or permit emissions into the ambient air from any direct or portable source in excess of one of the limits specified in ch. NR 431, Wis. Adm. Code. Where the presence of uncombined water is the only reason for failure to meet the requirements of ch. NR 431, Wis. Adm. Code, such failure is not a violation of the chapter. (s. NR 431.03, Wis. Adm. Code)

12. When the department requires instrumentation to monitor the operation of air pollution control equipment, or to monitor source performance, the instrument shall measure operational variables with the following accuracy: (s. NR 439.055(3), Wis. Adm. Code)

    a. The temperature monitoring device shall have an accuracy of 0.5% of the temperature being measured in degrees Fahrenheit or $\pm$ 5 ^{o}F of the temperature being measured, or the equivalent in degrees Celsius (centigrade), whichever is greater.

    b. The pressure drop monitoring device shall be accurate to within 5% of the pressure drop being measured or within 1 inch of water column, whichever is greater.

    c. The current, voltage, flow or pH monitoring device shall be accurate to within 5% of the specific variable being measured.

13. All instruments used for measuring source or air pollution control equipment operational variables shall be calibrated yearly or at a frequency based on good engineering practice as established by operational history, whichever is more frequent. (s. NR 439.055(4), Wis. Adm. Code)

14. No person may cause, allow, or permit emissions into the ambient air of any hazardous substance in such quantity, concentration, or duration as to be injurious to human health, plant or animal life unless the purpose of that emission is for the control of plant or animal life. Hazardous substances include, but are not limited to, hazardous air contaminants listed in Tables 1 to 5 of s. NR 445.04, Wis. Adm. Code. (s. NR 445.03, Wis. Adm. Code*).

15. Chapter NR 447, Wis. Adm. Code, applies to all air contaminant sources which may emit asbestos, to their owners and operators and to any person whose action causes the emission of asbestos to the ambient air, including demolition and renovation activities. Chapter NR 447, Wis. Adm. Code, establishes emission limitations for asbestos air contaminant sources, establishes procedures to be followed when working with asbestos materials and contains additional reporting and record keeping requirements for owners or operators of asbestos air contaminant sources in order to protect air quality. (ch. NR 447, Wis. Adm. Code)

16. Accidental Release Prevention Requirements

An owner or operator of a stationary source that has more than a threshold quantity of a regulated substance in a process, as determined under 40 CFR 68.115, shall comply with the requirements of 40 CFR Part 68, no later than the latest of the following dates:

a. June 21, 1999;
b. Three years after the date on which a regulated substance is first listed under 40 CFR 68.130; or
c. The date on which a regulated substance is first present above a threshold quantity in a process. (40 CFR 68.10)

II. D. Reporting Requirements

1. The Department shall be notified of the following events:

Event	Timing
a. Hazardous substance air spill	Immediate call: 1-800-943-0003
b. Malfunction or other unscheduled event which causes or may cause any emission limitation to be exceeded (except certain visible emission limit exceedences - see s. NR 439.03(4), Wis. Adm. Code.)	Notification by next business day of any such event at the source which is not reported in advance to the Department. Report the cause and duration of the exceedence, the period of time considered necessary for correction, and measures taken to minimize emissions during the period
c. Deviation from any other condition specified in this permit.	Notification by next business day identifying the deviation, cause, duration and steps taken to prevent recurrence.

(ss. 292.11(2) and 285.65(9), Wis. Stats., and ss. NR 439.03(4) and NR 445.08, Wis. Adm. Code)

2. The permittee shall report to the Department, in advance, schedules for planned shutdown and startup of air pollution control equipment and the measures to be taken to minimize the down time of the control equipment while the source is operating. Scheduled maintenance or any other scheduled event, including startup, shutdown or soot blowing procedures which have been approved by the Department under s. NR 436.03(2)(b), which causes an emission limit to be exceeded shall also be reported in advance to the Department. Advance reporting pursuant to this permit condition does not relieve any person from the duty to comply with any applicable emission limitations. Emissions in excess of the limits set in chs. NR 400-499, Wis. Adm. Code, may be allowed when the emissions are temporary and due to scheduled maintenance, startup or shutdown of operations carried out in accord

with a plan and schedule approved by the Department. (ss. NR 439.03(2)(b) and (6), Wis. Adm. Code)

3. The permittee shall furnish to the Department, within a reasonable time specified by the Department, any information that the Department may request in writing to determine whether cause exists to revise, revoke or suspend this permit or to determine compliance with this permit. Upon request, the permittee shall also furnish to the Department copies of records required to be kept pursuant to this permit. (s. NR 407.09(1)(f)5., Wis. Adm. Code)

4. The permittee shall submit the results of monitoring required by the permit to the Department according to the schedule established in Parts I and III of this permit. Any such report shall clearly identify all instances of deviations from permit requirements. All such reports shall be signed by the responsible official for the source. In addition, the responsible official shall certify that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. (s. 285.17(2), Wis. Stats., and s. NR 439.03(1)(b) and (10), Wis. Adm. Code)

5. Any document required under this permit and any document submitted to the Department, including reports, shall contain a certification by a responsible corporate official that meets the requirements of s. NR 407.05(4)(j), Wis. Adm. Code. (ss. NR 439.03(10) and (11), and NR 407.09(4)(a)1., Wis. Adm. Code).

6. Except for information determined to be confidential under s. 285.70(2), Wis. Stats., any information or reports obtained by the Department in the administration of ss. 285.01 to 285.87 and 299.15, Wis. Stats., will be available for public inspection at the offices of the Department. (s. 285.70(1), Wis. Stats.)

II. E. Right of Entry and Inspection

The permittee shall allow authorized representatives of the Department to enter upon the permittee's premises, to have access to and examine any record relating to emissions or required to be kept, and to make any inspection necessary to ascertain compliance with air pollution control laws and the terms of this permit. The Department may, for the purpose of determining a source's compliance with applicable requirements, sample or monitor at reasonable times production materials or other substances or operational parameters. (ss. 285.13 and 285.19, Wis. Stats., and s. NR 439.05, Wis. Adm. Code)

II. F. Malfunction Prevention and Abatement Plans

The owner or operator of any direct or portable source which may emit hazardous substances or emits more than 15 pounds in any day or 3 pounds in any hour of any air contaminant for which emission limits have been adopted shall prepare a written malfunction prevention and abatement plan to prevent, detect, and correct malfunctions or equipment failures which may cause any applicable emission limitation to be violated or which may cause air pollution. Any such plan shall be carried out by the owner or operator. The plan shall be updated at least every 5 years. The Department may require the plan to be submitted for review and approval. (s. NR 439.11, Wis. Adm. Code)

II. G. Emission Control Action Plan

For source(s) covered by this permit which emit 0.25 tons or more per day of any air contaminant for which air standards have been adopted, the permittee shall prepare an emission control action program, consistent with good industrial practice and safe operating procedures, for reducing the emission of air contaminants into the outdoor atmosphere during periods of an air pollution alert, air pollution warning or air pollution emergency declared under s. NR 493.03(2), Wis. Adm. Code. The emission control action program shall be in writing, available on the premises and is subject to review and approval by the Department on request. (s. NR 493.04, Wis. Adm. Code*)

II. H. Change in Ownership or Control

In the event of a change in ownership or operational control of a source, the permittee shall file a written request for an administrative permit revision in accordance with s. NR 407.11, Wis. Adm. Code. The request should include a written agreement between the current and new owner or operator which sets forth a specific date for transfer of permit responsibility, coverage and liability. If the Department determines that no other change in this permit is necessary, this permit may be revised according to the administrative revision procedures in s. NR 407.11, Wis. Adm. Code. (s. NR 407.11(3)(a), Wis. Adm. Code)

II. I. Permit Flexibility, Revision, Suspension, and Revocation

1. Changes to the source which are not modifications and changes in permit content are regulated under the permit flexibility provisions of s. 285.60(4m), Wis. Stats., and s. NR 407.025, Wis. Adm. Code, and the permit revision provisions in ss. NR 407.11, NR 407.12, NR 407.13, NR 407.14, and NR 407.16, Wis. Adm. Code.

2. An operation permit may be suspended or revoked, in whole or in part, for cause. (ss. NR 407.09(1)(f)3. and NR 407.15, Wis. Adm. Code.)

II. J. Construction, Reconstruction, Replacement, Relocation or Modification

1. Unless the replacement is authorized by a permit or is exempt under s. NR 406.04, Wis. Adm. Code, replacement of the source(s) covered by this permit is prohibited. (s. 285.60(1)(a), Wis. Stats.)

2. No person may commence construction, reconstruction, replacement, relocation or modification of a stationary source unless the person has a construction permit for the source or unless the source is exempt from the requirement to obtain a permit under s. 285.60(5), Wis. Stats., or under ch. NR 406, Wis. Adm. Code. Applications for the construction permit shall be submitted on forms which are available from the Department at its Madison headquarters and district offices. (s. 285.60(1)(a), Wis. Stats.)

   Note: The address of the Madison headquarters is: Wisconsin Department of Natural Resources, Bureau of Air Management, P. O. Box 7921, Madison, WI 53707, Attention: Permit Application Forms

3. For new or modified sources for which no construction permit is required, the application for an operation permit shall be filed before the source commences construction or modification. (s. NR 407.04, Wis. Adm. Code).

II. K. Circumvention

1. The installation or use of any article, machine, equipment, process, or method which conceals an emission which would otherwise constitute a violation of an applicable rule is prohibited unless written approval has been obtained from the Department. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve compliance and the unnecessary separation of an operation into parts to avoid coverage by a rule that applies only to operations larger than a specified size. (s. NR 439.10, Wis. Adm. Code)

2. No one may render inaccurate any monitoring device or method required under ch. NR 439, Wis. Adm. Code, or in this permit. (s. NR 439.03(12), Wis. Adm. Code).

II. L. Civil/Criminal Liability

1. Nothing in this permit shall be construed to relieve the permit holder from civil and/or criminal penalties under ss. 285.87 and 299.15, Wis. Stats., for violation of the terms or conditions of this permit, or for violation of ss. 285.01 to 285.87, 292.11(2) and 299.15, Wis. Stats., or of any rule or any special order issued under those sections except where the operation permit shield provisions of s. 285.62(9)(b), Wis. Stats., are applicable. (s. 285.62(9)(a), Wis. Stats.)

2. The permittee has the duty to comply with all conditions of the permit. Any noncompliance with this permit constitutes a violation of the Wisconsin statutes, the federal clean air act, or both, and is grounds for enforcement action; for permit suspension, revocation or revision; or, if allowed under s. 285.62(6), Wis. Stats., for denial of a permit renewal application. (ss. NR 407.14, NR 407.15, and NR 407.09(1)(f)1., Wis. Adm. Code, s. 285.60(7), Wis. Stats. and 42 USC 7661a)

3. The following items are provided per s. NR 407.09(1)(d) and (f), Wis. Adm. Code:

   a. It is not a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with this permit. (s. NR 407.09(1)(f)2., Wis. Adm. Code)

   b. The filing of a request by the permittee for a permit revision or revocation, or the filing of a notification of planned changes under s. NR 407.025, Wis. Adm. Code, or of anticipated noncompliance, does not stay any permit condition. (s. NR 407.09(1)(f)3., Wis. Adm. Code)

   c. The issuance of this permit does not convey any property rights of any sort, or any exclusive privilege, nor does it authorize any injury to private property or any invasion of personal rights. (s. NR 407.09(1)(f)4., Wis. Adm. Code)

   d. The provisions of this permit are severable. In the event of a successful challenge to any portion of the permit, all other portions of the permit remain valid and effective. (s. NR 407.09(1)(d), Wis. Adm. Code)

II. M. Recordkeeping Requirements

1. The permittee shall maintain the following records, per s. NR 439.04, Wis. Adm. Code:

   a. Records of all sampling, testing and monitoring conducted or required under chs. NR 400 to 499 or under this permit. Records of sampling, testing or monitoring shall include the following:

      1) The date, monitoring site and time and duration of sampling, testing, monitoring or measurements.
      2) The dates the analyses were performed.
      3) The company or entity that performed the analysis.
      4) The analytical techniques or methods used, including supporting information such as calibration and maintenance records of all original recording charts for continuous monitoring instrumentation including emissions or equipment monitors.
      5) The results of the analyses.
      6) The relevant operating conditions that existed at the time of sampling, testing, monitoring or measurement.

   b. Records detailing all malfunctions which cause any applicable emission limitation to be exceeded, including logs to document the implementation of the plan required under s. NR 439.11, Wis. Adm. Code;

   c. Records detailing all activities specified in any compliance schedule approved by the Department under chs. NR 400 to 499, Wis. Adm. Code; and

   d. Any other records relating to the emission of air contaminants which may be requested in writing by the Department.

2. The owner or operator of a source not subject to s. NR 445.05(6), Wis. Adm. Code, shall maintain the following records in writing at the source, as appropriate:

   a. The hazardous air contaminants in Table 5 of s. NR 445.04 the source is capable of emitting.

b. The allowable emissions for each hazardous air contaminant identified in a. above for each emissions unit.
c. The methods used to calculate allowable emissions under b. above, including:
   i. All calculations which show the dimensional units for all values used.
   ii. Emission factors used and reference to stack tests, mass balance calculations or EPA documents that each emission factor is based on.
d. Information to support exemption claims including fuels used, laboratory status or downwash minimization stack height calculations as appropriate. (s. NR 445.05(4r)(c), Wis. Adm. Code*)

3. Owners and operators of facilities required to file emission inventory reports shall keep accurate and reliable records sufficient to enable verification of the reports by the department. (s. NR 438.03(4), Wis. Adm. Code)

4. Copies of all records and reports required under this permit shall be retained by the permittee for a period of 5 years. (s. NR 439.04(2), Wis. Adm. Code)

II. N. Compliance Certification

1. The permittee shall submit compliance certifications to the Department, and part 70 sources shall also submit this compliance certification to the United States Environmental Protection Agency. (s. NR 439.03(1)(c) and (9), Wis. Adm. Code)

   a. The compliance certification with all conditions in this operation permit shall be submitted according to the schedule established in Part I.J.5.b.(2) of the operation permit. (s. NR 439.03(1)(c), Wis. Adm. Code)

   b. The certification shall include the following:

      1) Identification of each permit term or condition that is the basis of the certification;
      2) The compliance status of the source with respect to each term or condition identified in 1);
      3) Whether compliance was continuous or intermittent;
      4) Method(s) used for determining the compliance status, currently and over the previous 12 month period;
      5) Compliance status with respect to 40 CFR 68 (Accidental Release Prevention) including registration and submission of the risk management plan, as specified in 40 CFR 68.160 and 68.150, respectively, if applicable.
      6) Other information required to determine the compliance status of the source, as specified in this permit. (s. NR 439.03(8), Wis. Adm. Code)

2. Compliance certifications shall be signed by a responsible official of the source. The responsible official shall certify that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. (s. NR 439.03(10), Wis. Adm. Code)

II. O. Required Air Emission Inventory Reports

The permittee shall annually submit to the Department an emission inventory report of annual, actual emissions or throughput information in accordance with ch. NR 438, Wis. Adm. Code. (s. NR 438.03, Wis. Adm. Code)

II. P. Annual Emission Fees

The permittee shall pay an annual emissions fee to the Department at the rate specified in s. 285.69(2), Wis. Stats. (ss. NR 410.04 and NR 407.09(1)(e), Wis. Adm. Code)

II. Q. General Provisions for Hazardous Air Pollutant MACT Standards

The general provisions in ch. NR 460, Wis. Adm. Code, apply to any permittee that is affected or becomes affected by a standard promulgated by EPA under section 112 of the act (42 USC 7412). (s. NR 460.01, Wis. Adm. Code)

II. R. Stratospheric Ozone Protection

1. Federal Requirements. (Call 1-800-296-1996 for information)

a. The permittee shall comply with the standards for labeling of products using ozone-depleting substances pursuant to 40 CFR Part 82, Subpart E:

1) All containers in which a class I or class II substance is stored or transported, all products containing a class I substance and all products directly manufactured with a class I substance must bear the required warning statement if it is being introduced into interstate commerce pursuant to section 82.106.
2) The placement of the required warning statement must comply with the requirements pursuant to section 82.108.
3) The form of the label bearing the required warning statement must comply with the requirements pursuant to section 82.110.
4) No person may modify, remove or interfere with the required warning statement except as described in section 82.112.

b. The permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR Part 82, Subpart F, except as provided for Motor Vehicle Air Conditioners (MVACs) in 40 CFR Part 82, Subpart B:

1) Persons opening appliances for maintenance, service, repair or disposal must comply with the required practices pursuant to section 82.156.
2) Equipment used during the maintenance, service, repair or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to section 82.158.
3) Persons performing maintenance, service, repair or disposal of appliances must be certified by an approved technician certification program pursuant to section 82.161.
4) Persons disposing of small appliances, MVACs, and MVAC-like appliances must comply with recordkeeping requirements pursuant to section 82.166. (The term, "MVAC-like appliance", is defined in section 82.152)
5) Persons owning commercial or industrial process refrigeration equipment must comply with the leak repair requirements pursuant to section 82.156.
6) Owners/operators of appliances normally containing 50 or more pounds of refrigerant must keep records of refrigerant purchased and added to such appliances pursuant to section 82.166.

c. If the permittee manufactures, transforms, imports or exports a class I or class II substance, the permittee is subject to all the requirements as specified in 40 CFR part 82, Subpart A, Production and Consumption Controls.

d. If the permittee performs a service on motor (fleet) vehicles when this service involves ozone-depleting substance refrigerant in the motor vehicle air conditioner (MVAC), the permittee is subject to all the applicable requirements as specified in 40 CFR part 82, Subpart B, Servicing of Motor Vehicle Air Conditioners. The term "motor vehicle" as used in Subpart B does not include a vehicle in which final assembly of the vehicle has not been completed. The term "MVAC" as used in Subpart B does not include the air-tight sealed refrigeration system used as refrigerated cargo or system used on passenger buses using HCFC-22 refrigerant.

e. The permittee may be allowed to switch from any ozone-depleting substance to any alternative that is listed in the Significant New Alternatives Program (SNAP) promulgated pursuant to 40 CFR part 82, Subpart G, Significant New Alternatives Policy Program. (s. 285.65(12), Wis. Stats.)

2. State Requirements. (Call 1-608-264-6049 for information)

a. During the salvaging, dismantling or transporting of refrigeration equipment, no person may knowingly or negligently release ozone-depleting refrigerant to the environment, except for minimal releases that occur as a result of efforts to transfer ozone-depleting refrigerant into storage tanks. (s. 285.59(2r)(a), Wis. Stats.*)

b. No person may knowingly or negligently release from a storage tank to the environment ozone-depleting refrigerant that was removed during the salvaging, dismantling or transporting of refrigeration equipment, except for minimal releases that occur as a result of efforts to transfer ozone-depleting refrigerant into refrigeration equipment or other storage tanks. (s. 285.59(2r)(am), Wis. Stats.*)

c. No person may salvage or dismantle any refrigeration equipment unless:

1) That person holds and prominently displays an annual registration of certification obtained from the Department under s. NR 488.04, Wis. Adm. Code;
2) That person uses refrigerant recovery equipment approved by the Department under s. NR 488.07, Wis. Adm. Code, to transfer remaining ozone-depleting refrigerant from each piece of refrigeration equipment into storage tanks; and
3) Individuals who use the approved refrigerant recovery equipment have, or are working under the direct supervision of individuals who have, the qualifications required under s. NR 488.08, Wis. Adm. Code. (s. NR 488.03(3), Wis. Adm. Code*)

d. Any person who sells, gives or transports refrigeration equipment to a scrap metal processor shall:

1) Transfer ozone-depleting refrigerant from the refrigeration equipment into a storage tank using approved refrigerant recovery equipment or obtain and possess documentation that another person performed the transfer; and
2) Provide documentation to the scrap metal processor that he or she has complied with 1).

Note: Sample forms for the documentation of compliance with 1) are available from the Bureau of Air Management CFC Program.

EXEMPTION: 1) and 2) do not apply to a person who sells, gives or transports refrigeration equipment to a scrap metal processor when that processor has agreed in writing to transfer the ozone-depleting refrigerant into a storage tank using approved refrigerant recovery equipment and that the processor is registered with the Department under s. NR 488.04. (s. NR 488.05, Wis. Adm. Code*)

e. Any person who transports, for the purposes of salvaging or dismantling, refrigeration equipment that contains ozone-depleting refrigerant shall certify to the Department that person will not knowingly or negligently release ozone-depleting refrigerant to the environment, except for minimal releases that occur as a result of refrigerant recovery efforts. This certification shall be submitted annually, along with a description of the safe transport methods to be used, and the fees required under s. NR 488.11, Wis. Adm. Code. (s. NR 488.10, Wis. Adm. Code*)

PART III
PRE-APPROVED PROJECTS/FACILITY CHANGES

Part III. contains construction permit requirements and permits any future projects/facility changes listed in Part III.A. of this construction permit and operation permit. All projects/facility changes installed under Part III.A. of construction permit 04-SJZ-142 and operation permit 617056660-P01 after the issuance of this operation permit shall operate under the conditions established when the projects/facility change was installed even if the Environmental Cooperative Agreement expires or is revoked. If the Environmental Cooperative Agreement expires or is revoked for any reason, the installation of any future project/facility change under Part III.A. of this operation permit will be prohibited. All future projects shall then be permitted according to the traditional NR 406, Wis. Adm. Code, construction permitting program. If the Environmental Cooperative Agreement expires or is revoked for any reason, the permittee shall comply with any delayed compliance deadlines and practical interim requirements established by the Department in a written revocation decision until the Department issues the approvals required under chs. 280 to 295, Wis. Stats, that were replaced by the above referenced Environmental Cooperative Agreement.

III. A. Authorization of Future Projects/Facility Changes

The permittee may modify or construct any of the following projects/facility changes as approved under air pollution control permit 04-SJZ-142 and adopted by this operation permit, during the term of the Environmental Cooperative Agreement and new source permit 04-SJZ-142, subject to all applicable conditions of Part III of this permit. All other projects shall be permitted according to NR 406, Wis. Adm. Code, construction permitting program. If the Environmental Cooperative Agreement expires or is revoked for any reason, the installation of any future project/facility changes under Part III.A. of this operation permit will be prohibited. All future projects shall then be permitted according to the traditional NR 406, Wis. Adm. Code, construction permitting program. Potential to emit emissions (after controls) from the following projects/facility changes listed below shall be limited to less than 100 tons per year for each of the following criteria pollutants: carbon monoxide, oxides of nitrogen, particulate matter, sulfur dioxide, volatile organic compounds, lead, or lead compounds.[25] See Part III.K.1. for requirements. The facility shall meet any new state or federal requirement that is triggered as a result of the installation of processes under Part III.A. The permittee shall follow permit revision procedures to have any new state or federal requirement be included in the operation permit.

Project/Facility Change	Description
(1) Spray/Paint Booth Coating	Modify **OR** install a spray coating booth, effectively similar to that of existing spray booth Process P09. Such a project or facility change does not entail web coating.
(2) Ceramic Fiber Making	Modify **OR** install a ceramic fiber making line, effectively similar to that of existing ceramic fiber Process P15, P16, P17, P18, and P19.
(3) Chromium Plating	Modify, install, **OR** reconstruct a chromium electroplating operation, effectively similar to that of the existing chrome plating Process P08 and P14.
(4) R&D/Pilot/Development Projects	Modify **OR** install a process for manufacturing research, development, scale-up, **OR** prototype, which is **NOT** otherwise included in pre-approvals (1), (2), (3), or (5) of this permit that is not listed in s. NR 405.02(22)(a)1, Wis. Adm. Code.
(5) Web Coating	Modify a web coating line, **OR** install one or more web coating lines. The term web coating line has the meaning assigned at 40 CFR 63 Subpart JJJJ; that is, *any number of work stations, of which one or*

[25] Because potential to emit emissions (after controls) are limited to less than 100 tons per year for carbon monoxide, oxides of nitrogen, particulate matter, sulfur dioxide, volatile organic compounds, lead, or lead compounds, an environmental assessment is not required under section NR 150.03(8)(b)1, Wis. Adm. Code.

Project/Facility Change	Description
(5) Web Coating (continued)	*more applies a continuous layer of coating material across the entire width or any portion of the width of a web substrate, and any associated curing/drying equipment between an unwind or feed station and a rewind or cutting station.* Any of the web coating lines in existence at the time of issuance of this permit may be modified according to requirements contained in Part III of this permit. Installation of one or more new web coating lines and any subsequent or modification of such lines, may include, but is not limited to, a web coating line similar in design and function to that of the existing tape coating line [Process P07], the Gamma Line [Process P20], any of the optical film coating lines [Processes P06, P10, P11, P12, and P13], the E-Beam [Process I2], hot melt coater [Process I6], elastic coating 1 [Process I7], and elastic coating 2 [Process I8]. The term "web coating line," as used in this permit includes: • ancillary equipment of the web coating line for processing and/or handling raw materials associated with coating operations, to the extent that these operations are subject to 40 CFR 63 Subpart JJJJ rather than subject to 40 CFR 63 subpart HHHHH [Miscellaneous Coating Manufacturing]. • Installation of a thermal oxidizer or catalytic oxidizer, as may be needed to meet the emissions standards of 40 CFR 63 subpart JJJJ [Note: installation of a solvent recovery unit as an air pollution control device is not included under this pre-approved project]

III. B. Requirements that apply to all projects/facility changes authorized under Part III.A: General

1. The facility shall meet the facility-wide VOC emissions cap of 20.75 tons per month, averaged over any 12 consecutive month period.

2. No project/facility change authorized under Part III.A of this permit shall constitute any of the stationary sources named under 40 CFR 52.21(b)(1)(i)(a) and NR 405.02(22)(a), Wis. Adm. Code, for which the threshold for a major stationary source is 100 tons per year of any regulated NSR pollutant.

3. VOC emissions across the entire facility shall be compiled for each month, by the 20th day of the succeeding month, according to the following:

(a) For each month:
COMPILE: daily VOC emissions data for all processes at the facility
CALCULATE: VOC emissions for each month according to I.J.1.b.(2) and III.K.1.
CALCULATE: average monthly VOC emissions by summing the emissions of the current month with those of the preceding 11 months, and dividing by 12 according to I.J.1.b.(3)
DUE: by the 20th day of the following month and include this emission data in the Semi-annual Monitoring Summary Report

4. The permittee shall maintain a log which identifies each instance of a project/facility change made under authorization of Part III.A of this permit

5. For each instance of a project/facility change made under authorization of Part III.A of this permit, the following notifications shall be provided to Wisconsin DNR.

(a) Initial Notification.

1. for R&D/Pilot/Development projects authorized under Part III.A(4) of this permit, the notification shall be sent to Wisconsin DNR within 10 days prior to implementation of the project/facility change, and shall include a description of how records will be maintained for that project for purposes of assuring continued compliance with the facility-wide emissions limit as well as any relevant limits. The notification shall also include an operating schedule, explanation of any calculations, emission factors, or other information which will enable the recordkeeping to be performed.

2. for all other projects authorized under Part III.A of this permit, the notification shall be sent to Wisconsin DNR within 3 days prior to implementation of the project/facility. Recordkeeping for these projects will be performed according to requirements of the relevant section of Part III.A.

(b) Start-up Notification. Notify Wisconsin DNR within 30 calendar days after start-up of any project/facility change authorized under Part III.A of this permit. This notification shall include the following information.

1. a general description of the project, emission calculations, emission rates, identification of which pre-approval under Part III.A of the permit applies, and an explanation of why the project is covered under that pre-approval.

2. a listing of all applicable permit requirements for the pre-approved project/facility change [e.g. a web coating line installed without a thermal oxidizer is not subject to the thermal oxidizer requirements delineated in Part III.J.]

3. how VOC emissions will be tracked against the facility cap in addition to requirements in Part I.J.1. [including a description of emissions factors]

4. identification of any NR 445 substances, and the analysis for each, as required under this permit, demonstrating that the NR 445 emission threshold is satisfied, or that through modeling the concentration of the NR 445 substance at the property line is below required levels.

5. identification of any of the criteria pollutants NOx, SOx, or PM, and modeling or other demonstration, as required under this permit, showing that the NAAQS and ambient air increments will not be exceeded at the property line of the facility[26]

6. Applicable requirements for projects undertaken per the construction permit under Part III will be incorporated into operation permit using the procedures outlined within s. NR 407.07(3), Wis. Adm. Code upon renewal of the operation permit or through permit revision, whichever is most appropriate.

[26] The modeling analysis shall include the most recent list of stacks and stack parameters.

III. C. Requirements that apply to all projects/facility changes authorized under Part III.A: Evaluation of NR 445 substances

1. This facility shall apply NR 445 with revisions once approved.

2. No Table B (pesticides, rodenticides, insecticides, herbicides, and fungicides) or Table C (pharmaceuticals) substances of NR 445 shall be emitted by any project/facility change authorized under Part III.A of this permit.

3. All modeling of emissions performed in connection with evaluation of NR 445 substances, as noted herein, shall be consistent with *WDNR Dispersion Modeling Guidelines* (November 2003).[27]

4. Prior to implementation of any project/facility change authorized under Part III.A of this permit, each Table A substance of NR 445 which will be emitted by the equipment of that project/facility change shall be evaluated according to the procedures set forth in items III.C.5 of Part III, with the following exceptions.

(a) Evaluation of Table A substances of NR 445 is not required for any project/facility change authorized under Part III.A.5. All such project/facility changes are associated with an affected source defined by and subject to or subsumed under [according to the streamlining analysis] a standard promulgated under section 112 of the Clean Air Act. [s. NR 445.01(1)(b), Wis. Adm. Code]

(b) Evaluation of Table A substances of NR 445 is required only for substances other than chromium for any project/facility change authorized under Part III.A.3. All such project/facility changes involve an affected source defined by and subject to a standard promulgated under section 112 of the Clean Air Act. [s. NR 445.01(1)(b), Wis. Adm. Code]

5. **PROCEDURE: Evaluation of Table A NR 445 Hazardous Air Pollutants**

(a) **IDENTIFY:** all Table A NR 445 substances that will be emitted by the new or modified equipment of the proposed project/facility change, consistent with the level of due diligence defined at NR 445.02(5).

(b) **QUANTIFY:** potential hourly emissions of each Table A substance of NR 445 identified at Condition C.4.(a) by emission point for the equipment of the proposed project/facility change

(c) **SUM:** for each substance identified at Condition C.4.(a), sum for each of the four stack categories of Table A the potential hourly emissions from equipment of the proposed project/facility change, with exception of any exempt emissions, such as those associated with equipment subject to section 112 of the Clean Air Act [s. NR 445.07(6)(b)1. and s. NR 445.01(1)(b), Wis. Adm. Code]

(d) **COMPARE:** each group (the four stack categories) of emissions with the corresponding threshold found in Column (c), (d), (e), or (f) of Table A

IF: no group of emissions exceeds the respective thresholds, **THEN:** document the analysis and submit with the Start-up Notification under Condition Part III.B.5.(b). **OTHERWISE:** proceed to Condition Part III.C.5.(e)
[s. NR 445.07(6)(b)2. and s. NR 455.07(6)(c), Wis. Adm. Code]

(e) **MODEL:** to determine the maximum potential concentration of the substance off the source property, including potential emissions of the substance from both the proposed project/facility change and the rest of the facility, with exception of any exempt emissions, such as those associated with equipment subject to section 112 of the

[27] The modeling analysis shall include the most recent list of stacks and stack parameters.

Clean Air Act [s. NR 445.07(6)(c), Wis. Adm. Code]. **IF:** this concentration is no more than the corresponding concentration in column (g) of Table A, **THEN:** document the analysis and submit with the Start-up Notification under Condition Part III.B.5.(b), **OTHERWISE:** proceed to Condition Part III.C.5.(f) or (g). [28]

(f) **APPLY:** one of the compliance methods of NR 445.08(2)(a), (b), (c), (d), or (e), and reapplying the modeling analysis, if applicable. Any operating or other limitation (e.g. limiting throughput or hours of operation of an emissions unit) which is applied under NR 445.08(2)(a), (b), (c), (d), or (e) shall be included in the Start-up Notification under Condition Part III.B.5.(b), along with suitable recordkeeping which provides ongoing demonstration of compliance with that operating or other limitation. [s. NR 445.08(2)(a) - (e), Wis. Adm. Code]

(g) **APPLY:** BACT or LAER, in lieu of a limitation under Condition Part III.C.5.(f), if this is identified as an option in column (i) of Table A [s. NR 445.08(2)(f), Wis. Adm. Code]. Submit a proposal for BACT or LAER, as appropriate, to WDNR, and do not proceed with the proposed change until approved by WDNR.

[28] The modeling analysis shall include the most recent list of stacks and stack parameters.

III. D. Requirements that apply to all projects/facility changes authorized under Part III.A: Evaluation of PM, NOx and SOx emissions

1. Prior to implementation of any project/facility change authorized under Part III.A of this permit which will involve an increase of potential emissions of PM, NOx, **AND/OR** SOx, the permittee shall assess compliance with the corresponding National Ambient Air Quality Standards and PSD increments. The facility-wide dispersion model, as noted at Part I.J.2.a, shall be revised according to the potential emissions of PM, NOx, **AND/OR** SOx.

2. All modeling shall be performed in accordance with *WDNR Dispersion Modeling Guidelines* (November 2003). [29]

3. **IF:** the modeling demonstrates compliance with the PSD increments and National Ambient Air Quality Standards (NAAQS) for each of the substances PM, NOx, and SOx which will be emitted by the project/facility change authorized under Part III.A, **THEN:** the permittee may proceed with the project/facility change, according to all other applicable requirements of Part III of this permit. The permittee shall submit results of the updated dispersion model with the Start-up Notification under Condition Part III.B.5.(b).

4. **IF:** compliance with one or more PSD increments or NAAQS of PM, NOx, and SOx is not demonstrated by modeling performed under Part III.D.1, **THEN:** the permittee may re-do the dispersion model with revised stack parameters, work-practice limits, or other constraints which result in meeting the PSD increments and NAAQS. The permittee shall submit results of this dispersion model in Start-up Notification under Condition Part III.B.5.(b)., along with the corresponding constraints, and record-keeping which is put in place to demonstrate ongoing compliance with the constraints.

III. E. Requirements that apply to all projects/facility changes authorized under Part III.A: Stack Parameters

1. The permittee shall maintain a current list of stacks and corresponding parameters. Prior to implementation of any project/facility change authorized under Part III.A of this permit which requires assessment by dispersion modeling under Part III.C or D, the permittee shall revise the list of stacks and their corresponding parameters with the list of stacks and their corresponding parameters used in the most recent dispersion model showing compliance with NR 445, PSD increments and NAAQS. The list of stacks and stack parameters shall be continuously updated after a new process is installed so future modeling analyses includes the most current list of stacks and stack parameters.

2. No project/facility change authorized under Part III.A of this permit shall commence operation until the actual dimensions of all stacks of the facility are according to those listed in Part III.E.1.

III. F. Applicable Requirements for Specific Projects/Facility Changes Authorized under Part III.A: Spray/Paint Booth Coating

1. The permittee shall meet all conditions at section H of Part I of this permit for each new or modified spray/paint booth coating project. These requirements shall apply separately to each such spray booth including the LACT requirements in which each spray booth shall utilize high volume low pressure systems (HVLP) according to I.H.2.a.(1) and each spray booth shall be allotted a VOC emissions limit of 2,337 lb/month, averaged over 12 months.

[29] The modeling analysis shall include the most recent list of stacks and stack parameters.

III. G. Applicable Requirements for Specific Projects/Facility Changes Authorized under Part III.A: Ceramic Fiber Making

1. The permittee shall meet all conditions at section I of Part I of this permit for each new or modified ceramic fiber maker. These requirements shall apply to the collection of all such lines, with exception of the requirement at I.I.1.a.(2) for control efficiency, which shall be adjusted by the permittee as may be necessary to meet the formaldehyde emissions limit stated at I.I.1.a.(1).

III. H. Applicable Requirements for Specific Projects/Facility Changes Authorized under Part III.A: Chromium Plating

The permittee shall meet all conditions at section G of Part I of this permit for each modification of P08 or P14. The following requirements apply to each new or reconstructed chromium plating line. The requirement for advance written approval under 40 CFR 63.5 for each new or reconstructed affected source subject to 40 CFR 63 subpart N is met through the pre-approval of this permit. [40 CFR 63.5] *[NOTE: i.e., authority of the state to substitute for EPA for approval of new and reconstructed MACT sources]*

Pollutant	a. Limitations	b. Compliance Demonstration	c. Reference Test Methods, Recordkeeping and Monitoring Requirements
1. Chromium Emissions From Hard and Decorative Chromium Electroplating and Chromium Anodizing Tanks	(1) The concentration of total chromium at the exhaust of each affected source shall be no more than 0.015 mg/dscm. [40 CFR 63.342(c)(1)] (2) The emission limitations under I.H.(1)a. apply during tank operation as well as during periods of startup and shutdown. The emission limitations do not apply during periods of malfunction. However, work practice standards that address operation and maintenance and that are required by I.H.(1)b. shall be followed during malfunctions. [40 CFR 63.342(b)(1)] (3) Each new or reconstructed affected source shall be in compliance with the emission limits and corresponding applicable requirements as of start-up. [40 CFR 63.343(a)(2)]	(1) **OPERATE and MAINTAIN:** the affected source, including associated air pollution control devices and monitoring equipment, in a manner consistent with good air pollution control practices, consistent with the operation and maintenance plan required by paragraph I.H.(1).b.(3) of this section, including during periods of startup, shutdown, and malfunction [40 CFR 63.342(f)(1)(i)] (2) If a group of tanks share a common add-on air pollution control device, then compliance with the emission limit shall be determined according to Section 40 CFR 63.344(e), as applicable. [40 CFR 63.342(b)(2)] (3) **MALFUNCTIONS:** the permittee shall correct each malfunction as soon as practicable, according to the O&M Plan [40 CFR 63.342(f)(1)(ii)] (4) **OPERATION AND MAINTENANCE PLAN [O&M]** [40 CFR 63.342(f)(3)] (a) The permittee shall prepare an O&M Plan with content according to 40 CFR 63.342(f)(3)(i). This requirement may be met in part or in full using (SOP) manuals, OSHA plans, and/or other existing plans. (b) **RETAIN:** retain the O&M Plan for life of the 40 CFR 63 subpart N Affected Source, OR until the source is no longer subject to 40 CFR 63 subpart N. Previous versions of the O&M Plan shall be retained	(1) **IF:** the permittee elects to meet the emissions standard for chromium by applying a composite mesh-pad [CMP] system air pollution control device, **OR:** by applying a combination of a CMP **AND** a packed bed scrubber air pollution control device, **THEN:** (a) **INSPECT and RECORD:** visually inspect, once per quarter, the composite mesh-pad [CMP] system air pollution control device as follows: • overall CMP inspection, to ensure proper drainage, no chronic acid buildup on pads, and no evidence of chemical attack on structure • the back part of the mesh pad closest to the fan to ensure no breakthrough of chromic acid mist • ductwork from the tank to the CMP to ensure no leaks [40 CFR 63.342 Table 1, 40 CFR63.346(b)(1)] (b) **PERFORM and RECORD:** washdown of the composite mesh-pads, according to the frequency specified by the manufacture, or equal specification [40 CFR 63.342 Table 1, 40 CFR63.346(b)(1)] (c) **MONITOR and RECORD:** pressure drop across the composite mesh-pad system air pollution control device Frequency: once per day that the affected source is operating [40 CFR 63.343(c)(1)(ii)] The affected source is in compliance with the standards if it is operating within ±1 inch H2O column

III. H. Applicable Requirements for Specific Projects/Facility Changes Authorized under Part III.A: Chromium Plating

The permittee shall meet all conditions at section G of Part I of this permit for each modification of P08 or P14. The following requirements apply to each new or reconstructed chromium plating line. The requirement for advance written approval under 40 CFR 63.5 for each new or reconstructed affected source subject to 40 CFR 63 subpart N is met through the pre-approval of this permit. [40 CFR 63.5] *[NOTE: i.e., authority of the state to substitute for EPA for approval of new and reconstructed MACT sources]*

Pollutant	a. Limitations	b. Compliance Demonstration	c. Reference Test Methods, Recordkeeping and Monitoring Requirements
1. Chromium Emissions From Hard and Decorative Chromium Electroplating and Chromium Anodizing Tanks (continued)		for 5 yrs (c) **IF:** a malfunction occurs **AND** actions taken are inconsistent with the O&M Plan, **THEN:** • **RECORD:** the actual actions taken, **AND** • **REPORT:** by telephone [Due: 2 working days after commencing the actions inconsistent with the plan], **AND** • **SUBMIT:** by written letter [due: 7 work days after the end of the event] (d) **IF:** a malfunction occurs which is inadequately addressed by the O&M Plan, **THEN REVISE:** the O&M Plan within 45 days of the malfunction event (5) **SUBMIT:** Semiannual Summary Report Due**:** each January 30 and July 30, for the preceding calendar half-year reporting period Content**:** according 40 CFR 63.347(g)(3) [40 CFR 63.347(g)(1)] **IF:** more than one monitoring device is used to demonstrate compliance with the emission standards, **THEN REPORT**: the results for each monitoring device, **EXCEPT IF:** one monitoring device is a backup [40 CFR 63.347(g)(4)] **IF:** an emission limit is exceeded, **THEN SUBMIT:** the Summary Report quarterly, until a request to reduce reporting frequency is approved according to	of the pressure drop value established during the initial performance test, OR is operating within the range of compliant values for pressure drop established during multiple performance tests [40 CFR 63.343(c)(1)(ii)] (2) **IF:** the permittee elects to meet the emissions standard for chromium by applying a packed bed scrubber system air pollution control device, **THEN:** (a) **INSPECT and RECORD:** visually inspect, once per quarter, the packed bed scrubber air pollution control device as follows: • to ensure there is proper drainage, no chromic acid buildup on the packed beds, and no evidence of chemical attack on the structural integrity of the device • Visually inspect back portion of the chevron blade mist eliminator to ensure that it is dry and there is no breakthrough of chromic acid mist • ductwork from tank or tanks to the control device to ensure there are no leaks [40 CFR 63.342 Table 1, 40 CFR63.346(b)(1)] (b) **ADD:** fresh makeup water to the top of the packed bed, according to 40 CFR 63.342 Table 1, and according to the frequency specified by the manufacture, or equal specification [40 CFR 63.342 Table 1, 40 CFR63.346(b)(1)] (c) **MONITOR and RECORD:** velocity-P at the inlet to the packed-bed system, **AND** P- drop across the scrubber system Frequency: once per day that the affected source is

III. H. Applicable Requirements for Specific Projects/Facility Changes Authorized under Part III.A: Chromium Plating

The permittee shall meet all conditions at section G of Part I of this permit for each modification of P08 or P14. The following requirements apply to each new or reconstructed chromium plating line. The requirement for advance written approval under 40 CFR 63.5 for each new or reconstructed affected source subject to 40 CFR 63 subpart N is met through the pre-approval of this permit. [40 CFR 63.5] *[NOTE: i.e., authority of the state to substitute for EPA for approval of new and reconstructed MACT sources]*

Pollutant	a. Limitations	b. Compliance Demonstration	c. Reference Test Methods, Recordkeeping and Monitoring Requirements
1. Chromium Emissions From Hard and Decorative Chromium Electroplating and Chromium Anodizing Tanks (continued)		40 CFR 63.347(g)(2) [40 CFR 63.347(g)(1)(ii)] (6) For each new **OR** reconstructed affected source (a) **SUBMIT:** notification of construction or reconstruction, containing the information according to 40 CFR 63.345(b)(2) and (3), as applicable Due: "as soon as practicable before the construction or reconstruction is planned to commence" [40 CFR 63.345(b)(1)] (b) **SUBMIT:** notification of the actual date of startup within 30 calendar days after such date [40 CFR 63.347(c)(2)(iii)] (c) **SUBMIT:** Notification of Compliance Status (NCS), containing the information at 40 CFR 347(e) and (f) as applicable Due: within 90 day following completion of the compliance demonstration of 40 CFR 63.7 and §343(b) [40 CFR 63.347(e)] (7) **IF:** multiple sources are controlled by a common add-on air pollution control device, **INCLUDING IF:** at least one of the sources is **NOT** a MACT N Affected Source, **THEN:** (a) **MEASURE:** outlet Cr concentration according to 40 CFR 63.344(e), AND (b) **SUBMIT:** the compliance measurements and calculations with the Notification of Compliance Status required by 40 CFR 63.347(e)	operating [40 CFR 63.343(c)(2)(ii)] The affected source is in compliance with the standards if it is operating within: • ±10% of the velocity-P value established during the initial performance test, **AND** ±1 inch of H2O column of the P-drop value established during the initial performance test, **OR** • within the range of compliant operating parameter values established during multiple performance tests [40 CFR 63.343(c)(2)(ii)] (3) **IF:** the permittee elects to meet the emissions standard for chromium by applying a fiber-bed mist eliminator air pollution control device, **THEN:** (a) **INSPECT and RECORD:** visually inspect, once per quarter, the fiber-bed mist eliminator air pollution control device as follows: • the fiber-bed unit and prefiltering device to ensure there is proper drainage, no chromic acid buildup in the units, and no evidence of chemical attack on the structural integrity of the devices • ductwork from tank or tanks to the control device to ensure there are no leaks [40 CFR 63.342 Table 1, 40 CFR63.346(b)(1)] (b) **PERFORM and RECORD:** washdown of fiber elements, according to the frequency specified by the manufacture, or equal specification [40 CFR 63.342 Table 1, 40 CFR63.346(b)(1)] (c) **MONITOR and RECORD:** pressure drop across

III. H. Applicable Requirements for Specific Projects/Facility Changes Authorized under Part III.A: Chromium Plating

The permittee shall meet all conditions at section G of Part I of this permit for each modification of P08 or P14. The following requirements apply to each new or reconstructed chromium plating line. The requirement for advance written approval under 40 CFR 63.5 for each new or reconstructed affected source subject to 40 CFR 63 subpart N is met through the pre-approval of this permit. [40 CFR 63.5] *[NOTE: i.e., authority of the state to substitute for EPA for approval of new and reconstructed MACT sources]*

Pollutant	a. Limitations	b. Compliance Demonstration	c. Reference Test Methods, Recordkeeping and Monitoring Requirements
1. Chromium Emissions From Hard and Decorative Chromium Electroplating and Chromium Anodizing Tanks (continued)		[40 CFR 63.344(e)]	the across the fiber-bed mist eliminator, **AND** pressure drop across the control device installed upstream of the fiber bed to prevent plugging Frequency: once per day that the affected source is operating [40 CFR 63.343(c)(4)(ii)] The affected source is in compliance with the standards if it is operating within: • ±1 inch of H2O column of the P- drop value established during the initial performance test, **OR** • the range of compliant operating parameter values established during multiple performance tests [40 CFR 63.343(c)(4)(ii)] (4) **IF:** the permittee elects to meet the emissions standard for chromium by applying a foam blanket air pollution control device, **THEN:** (a) **MONITOR and RECORD:** foam blanket thickness Frequency: according to 40 CFR 63.343(c)(6)(ii) and (iii) [40 CFR 63.343(c)(6)(ii)] The affected source is in compliance with the standards if it is operating at a foam blanket thickness within: • ≥ the value established during the performance test, **OR** • < 1 inch [if option elected] [40 CFR 63.343(c)(6)(ii)] (5) **IF:** the permittee elects to meet the emissions

III. H. Applicable Requirements for Specific Projects/Facility Changes Authorized under Part III.A: Chromium Plating

The permittee shall meet all conditions at section G of Part I of this permit for each modification of P08 or P14. The following requirements apply to each new or reconstructed chromium plating line. The requirement for advance written approval under 40 CFR 63.5 for each new or reconstructed affected source subject to 40 CFR 63 subpart N is met through the pre-approval of this permit. [40 CFR 63.5] *[NOTE: i.e., authority of the state to substitute for EPA for approval of new and reconstructed MACT sources]*

Pollutant	a. Limitations	b. Compliance Demonstration	c. Reference Test Methods, Recordkeeping and Monitoring Requirements
1. Chromium Emissions From Hard and Decorative Chromium Electroplating and Chromium Anodizing Tanks (continued)			standard for chromium by using both a fume suppressant **AND** an add-on air pollution control device, **THEN:** (a) **PERFORM:** as applicable and according to 40 CFR 63.343(c)(7): • monitoring according to 40 CFR 343(c)(1) - (6), **AND** • work practice standards of Table 1 of 40 CFR 63.342 [40 CFR 63.343(c)(7)] (b) **MONITOR and RECORD:** the date and time that fume suppressants are added to the electroplating or anodizing bath [40 CFR 63.34b(b)(13)] (6) All monitoring devices used to demonstrate ongoing compliance with the emissions standard [through an applicable site-specific operating parameter] shall be installed to assure representative measurement, and shall be installed, operated, and calibrated according to manufacturer's written specifications, or equivalent. [40 CFR 63.344(d)(2)] (7) **RECORD:** each instance of maintenance of: (a) the affected source, **AND** (b) the CMP air pollution control device, **AND** (c) monitoring equipment [40 CFR 63.346(b)(2)] (8) **RECORD:** total process op. time for the reporting period [40 CFR 63.346(b)(11)] (9) **RECORD:** for each instance of a malfunction of the affected source [which could reasonably result in failure to meet an emission standard] and associated air pollution

III. H. Applicable Requirements for Specific Projects/Facility Changes Authorized under Part III.A: Chromium Plating

The permittee shall meet all conditions at section G of Part I of this permit for each modification of P08 or P14. The following requirements apply to each new or reconstructed chromium plating line. The requirement for advance written approval under 40 CFR 63.5 for each new or reconstructed affected source subject to 40 CFR 63 subpart N is met through the pre-approval of this permit. [40 CFR 63.5] *[NOTE: i.e., authority of the state to substitute for EPA for approval of new and reconstructed MACT sources]*

Pollutant	a. Limitations	b. Compliance Demonstration	c. Reference Test Methods, Recordkeeping and Monitoring Requirements
1. Chromium Emissions From Hard and Decorative Chromium Electroplating and Chromium Anodizing Tanks (continued)			control devices and monitoring equipment: (a) the occurrence, duration, and cause (if known) (b) each specific period (date, time of start/end) of excess emissions (c) actions taken during malfunction **IF** inconsistent with the O&M plan (d) other records as needed to demonstrate consistency with the O&M Plan [40 CFR 63.346(b)(3)-(5), (9)-(10)] (10) **CONDUCT:** an initial performance test, according to 40 CFR 63.343(b)(1) and 40 CFR 63.7, as applicable. (a) Due: within 180 days of startup (b) **IF:** an air pollution control device is used to meet the chromium emissions limit, **THEN:** establish, during the performance test, a site-specific operating parameter as applicable: • **IF:** use a composite mesh-pad [CMP] system air pollution control device, OR IF: use a CMP in conjunction with a packed bed scrubber, **THEN:** pressure drop across the CMP [40 CFR 63.343(c)(1)(i) and (c)(3)] • **IF:** use a packed bed scrubber air pollution control device, **THEN:** P-drop across the system, **AND** velocity-P at the common inlet of the control device [40 CFR 63.343(c)(2)(i)] • **IF:** use a wetting agent-type **OR** combination wetting agent-type/foam blanket fume suppressant, **THEN:** surface tension of the bath [40 CFR 63.343(c)(5)(i)] • **IF:** use a fiber bed mist eliminator, **THEN:** pressure drop across the across the fiber-bed mist eliminator, **AND** pressure across the control device installed upstream of the fiber bed to prevent plugging [40 CFR 63.343(c)(4)(i)] • **IF:** use a foam blanket, **THEN:** thickness of the foam

III. H. Applicable Requirements for Specific Projects/Facility Changes Authorized under Part III.A: Chromium Plating

The permittee shall meet all conditions at section G of Part I of this permit for each modification of P08 or P14. The following requirements apply to each new or reconstructed chromium plating line. The requirement for advance written approval under 40 CFR 63.5 for each new or reconstructed affected source subject to 40 CFR 63 subpart N is met through the pre-approval of this permit. [40 CFR 63.5] *[NOTE: i.e., authority of the state to substitute for EPA for approval of new and reconstructed MACT sources]*

Pollutant	a. Limitations	b. Compliance Demonstration	c. Reference Test Methods, Recordkeeping and Monitoring Requirements
1. Chromium Emissions From Hard and Decorative Chromium Electroplating and Chromium Anodizing Tanks (continued)			blanket, **OR MAY ELECT:** a default criteria for the foam blanket thickness of ≥1 inch [40 CFR 63.343(c)(6)(i)] (11) For each performance test: (a) **WRITE:** a test plan [submit to the Administrator only if requested] [40 CFR 63.344(a)] (b) **DOCUMENT:** test results according to 40 CFR 63.344(a)(1)-(9) **AND** 346(b)(6), including conditions during the performance tests, as needed to demonstrate compliance [40 CFR 63.344(a)] (c) **USE:** test methods according to test methods at §63.344(c), (d) **NOTIFY:** in writing, within 60 days prior to the test [40 CFR 63.347(d)]
2. Particulate Matter	(1) The most restrictive of the applicable limit found in [s. NR 415.05(1), Wis. Adm. Code] **AND** $E = 3.59\ (P)^{0.62}$ where, E is the emission limit in pounds per hour, and P is the process weight rate in tons per hour. [s. NR 415.05(2), Wis. Adm. Code] **OR** A more restrictive particulate matter emission limit determined by modeling. [s. 285.65(7), Wis. Stats.]	(1) If a control device is required for particulate matter emissions to meet the National Ambient Air Quality Standards (NAAQS), then the facility shall perform the associated monitoring required for that control device in accordance with the Wis. Adm. Code.	(1) **REFERENCE TEST METHOD: PM** **IF:** emissions testing is requested by the Department for purposes of determining compliance with the PM emissions limit, **THEN:** use 5, 5A, 5B, 5D, 5E, 5F, 5G, 5H or 17 including condensible backhalf emissions (U.S. EPA Method 202). [s. NR 439.06(1), Wis. Adm. Code.] (2) The permittee shall keep and maintain on site technical drawings, blueprints or equivalent records of the physical stack parameters. [s. NR 439.04(1)(d), Wis. Adm. Code] (3) **RECORD:** the appropriate operating data as necessary on the control device, if required, to satisfy requirements in the Wis. Adm. Code. (4) **RECORD:** each inspection, check, and any maintenance or repairs performed on the control device,

III. H. Applicable Requirements for Specific Projects/Facility Changes Authorized under Part III.A: Chromium Plating

The permittee shall meet all conditions at section G of Part I of this permit for each modification of P08 or P14. The following requirements apply to each new or reconstructed chromium plating line. The requirement for advance written approval under 40 CFR 63.5 for each new or reconstructed affected source subject to 40 CFR 63 subpart N is met through the pre-approval of this permit. [40 CFR 63.5] *[NOTE: i.e., authority of the state to substitute for EPA for approval of new and reconstructed MACT sources]*

Pollutant	a. Limitations	b. Compliance Demonstration	c. Reference Test Methods, Recordkeeping and Monitoring Requirements
2. Particulate Matter (continued)			if required, including the date and time of the action, initials of inspector, and the results. [ss. NR 439.04(1)(d), and NR 407.09(1)(c) Wis. Adm. Code] (5) **MAINTAIN:** the operating parameters on the control device, if required, in accordance with the manufacturer's recommendations, or equal, and calibrate at least once per year. [s. NR 439.11(1)(b) and s. NR 439.055(4), Wis. Adm. Code]
3. Visible Emissions	(1) 20% Opacity [s. NR 431.05, Wis. Adm. Code]	(1) The Compliance Demonstration requirements for chromium and particulate matter emissions, conditions under I.G.1.b. and I.G.2.b., are deemed sufficient to demonstrate compliance with the visible emission limit.	(1) **REFERENCE TEST METHOD: Visible Emissions** **IF:** emissions testing is requested by the Department for purposes of determining compliance with the visible emissions limit, **THEN:** use U.S. EPA Method 9, **OR:** other methods as approved by the Department. [s. NR 439.06(9)(a)1., Wis. Adm. Code] (2) The recordkeeping requirements for particulate matter emissions outlined in condition I.G.2.(c) also serve as recordkeeping requirements for visible emissions. [s. NR 407.09(1)(c)1.a., Wis. Adm. Code]
4. Volatile Organic Compounds	(1) Latest Available Control Techniques and Operating Practices Demonstrating Best Current Technology (LACT) determined to be the following: (a) the workpractice consisting of cleaning performed using only isopropyl alcohol (IPA) which is applied to parts using squeegee bottles which are no larger than 1-	(1) (a) The permittee shall calculate the number of 1-liter squeegee bottles used in one month, based on a 12-month rolling average (b) The 12-monthly average amount of 1-liter squeegee bottles used shall be calculated using the following equation: $\mathbf{E_{total}} = 3\mathbf{X_n}$ where, $\mathbf{E_{total}}$ = monthly average amount of squeegee bottles used;	(1) **MAINTAIN:** on-site, a Material Safety Data Sheet (MSDS) or equivalent to document the VOC content of each cleanup solvent used [ss. NR 439.04(1) and 439.04(4), Wis. Adm. Code] (2) **RECORD:** (a) monthly number of squeegee bottles used by each chrome process line, and the volume of bottles.

III. H. Applicable Requirements for Specific Projects/Facility Changes Authorized under Part III.A: Chromium Plating

The permittee shall meet all conditions at section G of Part I of this permit for each modification of P08 or P14. The following requirements apply to each new or reconstructed chromium plating line. The requirement for advance written approval under 40 CFR 63.5 for each new or reconstructed affected source subject to 40 CFR 63 subpart N is met through the pre-approval of this permit. [40 CFR 63.5] *[NOTE: i.e., authority of the state to substitute for EPA for approval of new and reconstructed MACT sources]*

Pollutant	a. Limitations	b. Compliance Demonstration	c. Reference Test Methods, Recordkeeping and Monitoring Requirements
4. Volatile Organic Compounds (continued)	liter in volume, and/or (b) no more than 1,790 1-liter squeegee bottles used per month, based on a 12-month rolling average, or an equivalent combination of bottles of different volume which results in VOC emissions of no more than 3,150 pounds per month, based on a 12-month rolling average (18.9 tons per year). [s. NR 424.03(2)(c), Wis. Adm. Code; s. 285.65(3) and s. 285.65(7), Wis. Stats.]	$\mathbf{X_n}$ = number of 1-liter squeegee bottles used in one month as calculated in condition III.H.4.b.(1).(a). [s. NR 407.09(4)(a)1., Wis. Adm. Code] OR (2) Provide the Wisconsin DNR for review and approval how the facility will meet the 3,150 lb/month based on a 12-month rolling average VOC emission limit. [s. NR 407.09(4)(a)1., Wis. Adm. Code]	(b) the total number of squeegee bottles used each year (c) the 12 month rolling average of squeegee bottles used (d) The actual and average monthly VOC emissions determined at the end of each calendar month according to III.H.4.b.(2). [s. NR 439.04(1)(d) and (3), Wis. Adm. Code]

III. I. Applicable Requirements for Specific Projects/Facility Changes Authorized under Part III.A: R&D/Pilot/Development Projects

For all projects in this R&D section: within 12 months of startup of a research and testing activity approved in this section, the facility shall determine maximum theoretical emissions, potential emissions, and the potential applicable State and Federal compliance requirements relating to this potential process. On or before the end of this 12 month period, 3M will decide if the process is to be placed into production or will otherwise remain at this facility. If the facility chooses to keep the process at this facility, and if emissions exceed permitting thresholds as identified in NR 406 and/or NR 407, Wis. Adm. Code, the facility shall apply for and receive either a new source construction permit and/or a modification of the Title V operating permit before production commences. If emissions are less than permitting thresholds and the project meets the exemptions identified in NR 406, Wis. Adm. Code, the Wisconsin DNR shall issue a construction permit exemption. If 3M chooses not to proceed with placing the process in production, the process shall be removed from the facility or remain non-operational. If 12 months is insufficient to provide 3M an ability to install, test, and determine the fate of the potential process under this approval, 3M is prohibited to continue work on the process/project until such time as 3M applies for and receives a new source construction permit per NR 406, Wis. Adm. Code, based on anticipated emissions from the process/project, for those projects above exemption levels identified in NR 406.04(2), Wis. Adm. Code. [NR 406.04(1)(i) & NR 406.03, Wis. Adm. Code]

Pollutant	a. Limitations	b. Compliance Demonstration	c. Reference Test Methods, Recordkeeping and Monitoring Requirements
1. Volatile Organic Compounds	(1) LACT consists of: (a) actual VOC emissions ≤25 ton/yr, averaged over any 12 consecutive month period, [s. NR 424.03(2)(c), Wis. Adm. Code, Environmental Cooperative Agreement between WI DNR and 3M of 10/2/2002 pursuant to s. 299.80, Wis. Stat., and s. 285.65(7), Wis. Stat.]	(1) **DOCUMENT:** calculations for determining VOC emissions (2) **RECORD:** for each month of operation: (a) amount (lbs) of each raw material used; (b) VOC emissions [lb/mo], and ton/yr [s. NR 439.04(d), Wis. Adm. Code] (3) **RECORD:** for each day, whether the emissions-generating portion of the process operated	(1) **Reference Test Method: VOCs** **IF:** emissions testing is requested by the Department for purposes of determining compliance with VOC emission limits, **THEN:** use US EPA Methods 18, 25, 25A or 25B, **OR** other methods as approved by the Department. [s. NR 439.06(3)(a), Wis. Adm. Code]
2. Particulate Matter	(1) The most restrictive of the applicable limit found in [s. NR 415.05(1), Wis. Adm. Code] **AND** $E = 3.59\ (P)^{0.62}$ where, E is the emission limit in pounds per hour, and P is the process weight rate in tons per hour. [s. NR 415.05(2), Wis. Adm. Code] **OR** A more restrictive particulate matter emission limit determined by	(1) If a control device is required for particulate matter emissions to meet the National Ambient Air Quality Standards (NAAQS), then the facility shall perform the associated monitoring required for that control device in accordance with the Wis. Adm. Code.	(1) **REFERENCE TEST METHOD: PM** **IF:** emissions testing is requested by the Department for purposes of determining compliance with the PM emissions limit, **THEN:** use 5, 5A, 5B, 5D, 5E, 5F, 5G, 5H or 17 including condensible backhalf emissions (U.S. EPA Method 202). [s. NR 439.06(1), Wis. Adm. Code.] (2) The permittee shall keep and maintain on site technical drawings, blueprints or equivalent records of the physical stack parameters. [s. NR 439.04(1)(d), Wis. Adm. Code] (3) **RECORD:** the appropriate operating data as necessary on the control device, if required, to satisfy

III. I. Applicable Requirements for Specific Projects/Facility Changes Authorized under Part III.A: R&D/Pilot/Development Projects

For all projects in this R&D section: within 12 months of startup of a research and testing activity approved in this section, the facility shall determine maximum theoretical emissions, potential emissions, and the potential applicable State and Federal compliance requirements relating to this potential process. On or before the end of this 12 month period, 3M will decide if the process is to be placed into production or will otherwise remain at this facility. If the facility chooses to keep the process at this facility, and if emissions exceed permitting thresholds as identified in NR 406 and/or NR 407, Wis. Adm. Code, the facility shall apply for and receive either a new source construction permit and/or a modification of the Title V operating permit before production commences. If emissions are less than permitting thresholds and the project meets the exemptions identified in NR 406, Wis. Adm. Code, the Wisconsin DNR shall issue a construction permit exemption. If 3M chooses not to proceed with placing the process in production, the process shall be removed from the facility or remain non-operational. If 12 months is insufficient to provide 3M an ability to install, test, and determine the fate of the potential process under this approval, 3M is prohibited to continue work on the process/project until such time as 3M applies for and receives a new source construction permit per NR 406, Wis. Adm. Code, based on anticipated emissions from the process/project, for those projects above exemption levels identified in NR 406.04(2), Wis. Adm. Code. [NR 406.04(1)(i) & NR 406.03, Wis. Adm. Code]

Pollutant	a. Limitations	b. Compliance Demonstration	c. Reference Test Methods, Recordkeeping and Monitoring Requirements
2. Particulate Matter (continued)	modeling. [s. 285.65(7), Wis. Stats.]		requirements in the Wis. Adm. Code. (4) **RECORD:** each inspection, check, and any maintenance or repairs performed on the control device, if required, including the date and time of the action, initials of inspector, and the results. [ss. NR 439.04(1)(d), and NR 407.09(1)(c) Wis. Adm. Code] (5) **MAINTAIN:** the operating parameters on the control device, if required, in accordance with the manufacturer's recommendations, or equal, and calibrate at least once per year. [s. NR 439.11(1)(b) and s. NR 439.055(4), Wis. Adm. Code]
3. Visible Emissions	(1) 20% Opacity [s. NR 431.05, Wis. Adm. Code]	(1) The compliance demonstration requirement for particulate matter emissions, condition under III.I.2.b.(1) are deemed sufficient to demonstrate compliance with the visible emission limit.	(1) **Reference Test Method: Visible Emissions IF:** emissions testing is requested by the Department for purposes of determining compliance with visible emission limits, THEN: use USEPA Method 9 in 40 CFR part 60, Appendix A, incorporated by reference in s. NR 484.04, Wis. Adm. Code, **OR** other methods as approved by the Department. [s. NR 439.06(9)(a)1., Wis. Adm. Code] (2) The recordkeeping requirements for particulate matter emissions outlined in condition III.I.2.c.(3) and (4) also serve as recordkeeping requirements for visible emissions. [s. NR 407.09(1)(c)1.a., Wis. Adm. Code]

III. J. Applicable Requirements for Specific Projects/Facility Changes Authorized under Part III. A: Web Coating

On the basis of a regulatory streamlining analysis performed according to U.S. EPA White Paper #2, the emission standards of 40 CFR 63 subpart JJJJ and attendant reporting, recordkeeping, and monitoring requirements subsume requirements of the following:

- NR 424 Control of Organic Compound Emissions from Process Lines
- NR 422 Control of Organic Compound Emissions from Surface Coating, Printing, and Asphalt Surfacing Operations
- 40 CFR 60 sub RR Pressure Sensitive Tape and Label Surface Coating

Installation of one or more web coating lines at the 3M Menomonie plant constitutes "modification of an existing affected source" under 40 CFR 63 subpart JJJJ [the affected source being the collection of web coating lines], and as such is not subject to advance written approval under 40 CFR 63.5. Reconstruction of the 40 CFR 63 subpart JJJJ affected source at the 3M Menomonie plant is not authorized under Part III.A of this permit.

III. J. Applicable Requirements for Specific Projects/Facility Changes Authorized under Part III. A: Web Coating

These requirements apply, as applicable, to the entire collection of web coating lines upon the first instance of this section being invoked by a qualifying modification or installation of a web coating line. The requirements at section I.F.1 are at that time superseded by this section (Part III.J), with excepting of I.F.1.a..(3) and I.F.1.b.(5) and (6), and (7), which pertain to several of the existing MRC Resin Coating Lines.

Pollutant	a. Emission Limitations	b. Compliance Demonstration
1. Volatile Organic Compounds (VOC) and Organic Hazardous Air Pollutant (OHAP) Emissions	(1) The permittee shall comply with these requirements the earlier of: 1) the effective date of this Title V operating permit, **OR** 2) the compliance date of December 5, 2005 as referenced at 40 CFR 63.330(a) [40 CFR 63.3330(a), and s. 285.65(13), Wis. Stats.] (2) **LIMIT:** the web coating lines, as a collection of all web coating lines at the facility, shall limit VOC emissions to the level specified in (a), (b), (c), **OR** (d): (a) no more than 5 percent of the VOC applied for each month (95 percent reduction); **OR** (b) no more than 4 percent of the mass of coating materials applied for each month; **OR** (c) no more than 20 percent of the mass of coating solids applied for each month; **OR** (d) If the permittee uses an oxidizer to control VOC	(1) Each month, the permittee shall demonstrate compliance with any one or more of the emissions standards options at 40 CFR 63.3320(b), using the applicable procedures at 40 CFR 63.3370 for the combination of always-controlled, intermittently-controlled, and never-controlled workstations of the affected source. [40 CFR 63.3370] (2) **DETERMINE:** "as-purchased" volatile organic content **AND** coating solids content of each coating material applied, as applicable for the emission limit(s) elected in III.J.1.a.(2) for that month **HOW:** • by testing using EPA Method 24 [40 CFR part 60, Appendix A], according to 40 CFR 63.3360(d)(1), **OR** • by formulation data, according to 40 CFR 63.3360(d)(2), **OR** • by an alternative test method, approved by the Administrator at EPA in accordance with 40 CFR 63.7(f) (3) **DETERMINE:** "as-applied" volatile organic content **AND** coating solids content of each coating material applied, as applicable for the emission limit(s) elected in III.J.1.a(2) for that month **HOW:** using Equation 1b and 2, as applicable, according to 40 CFR 63.3370 [40 CFR 63.3360(d), and s. 285.65(13), Wis. Stats.]

III. J. Applicable Requirements for Specific Projects/Facility Changes Authorized under Part III. A: Web Coating

These requirements apply, as applicable, to the entire collection of web coating lines upon the first instance of this section being invoked by a qualifying modification or installation of a web coating line. The requirements at section I.F.1 are at that time superseded by this section (Part III.J), with excepting of I.F.1.a..(3) and I.F.1.b.(5) and (6), and (7), which pertain to several of the existing MRC Resin Coating Lines.

Pollutant	a. Emission Limitations	b. Compliance Demonstration
	emissions, operate the oxidizer such that an outlet VOC concentration of no greater than 20 parts per million by volume (ppmv) is achieved and the efficiency of the capture system is 100 percent. [40 CFR 63.3320(b), and s. 285.65(13), Wis. Stats.] (3) The emissions standards apply at all times, **EXCEPT:** during startup, shutdown, and malfunction [40 CFR 63.6(f)(1)] (4) The permittee shall comply with the appropriate VOC limitations listed in NR 419 through NR 424 of the Wis. Adm. Code. [s. 285.65(7), Wis. Stats.]	

III. J. Air Pollution Control Device (APCD) Requirements for Web Coating Lines. **IF:** a thermal oxidizer or catalytic oxidizer is installed or otherwise used to meet the emission limits of 40 CFR 63 sub JJJJ, **THEN:** meet the following additional requirements, as applicable.

Applies to:	a. Meet the following requirement	Citation
(1) each work station of each web coating line which is intermittently controlled by an air pollution control device	**PREVENT:** unintentional bypass of the air pollution control device (APCD) by using any of the following: (a) auto-stop the web coating line of the work station when flow is diverted away from an operating APCD (b) car-seal or lock-and-key valve closure, secured in closed position (c) air flow position indicator (d) continuous monitoring of valve position when source is operating **AND** APCD is in use	40 CFR 63.3350(c)(4)
(2) each intermittently-controlled work station with bypass control provided by auto-stop the web coating line	**INSPECT:** the auto-stop system to verify that it will detect flow diversions and shut down operations **WHEN:** once per month	40 CFR 63.3350(c)(4)

III. J. Air Pollution Control Device (APCD) Requirements for Web Coating Lines. **IF:** a thermal oxidizer or catalytic oxidizer is installed or otherwise used to meet the emission limits of 40 CFR 63 sub JJJJ, **THEN:** meet the following additional requirements, as applicable.

Applies to:	a. Meet the following requirement	Citation
(3) each intermittently-controlled work station with bypass control provided by car-seal or lock-and-key valve closure	**INSPECT:** the seal or closure mechanism to verify that the valve or damper is closed **WHEN:** once per month **HOW:** visual	40 CFR 63.3350(c)(2)
(4) each intermittently-controlled work station with bypass control provided by an air flow position indicator	**INSTALL**, **CALIBRATE**, **MAINTAIN**, **AND** **OPERATE**: according to the manufacturer's specifications **LOCATE:** at the entrance to each air pollution control device (APCD) bypass line **RECORD:** time, flow control position **WHEN:** • once per hour, **AND** • each occurrence of a change of flow direction	40 CFR 63.3350(c)(1)
(5) each intermittently-controlled work station with bypass control provided by continuous monitoring of valve position	**INSPECT:** to verify that the monitor will indicate valve position **WHEN:** once per month	40 CFR 63.3350(c)(3)

III. J. Recordkeeping Requirements for Web Coating Lines. Meet the following requirements, as applicable.

Applies to:	a. Meet the following requirement	Citation
each work station intermittently controlled by an APCD, DURING: each bypass of the APCD	**RECORD:** the mass of each coating material applied	40 CFR 63.3350(c)
each continuous parameter monitoring system (CPMS) used by each: • APCD • capture system • bypass control	**RECORD**: each: • inspection • calibration • validation check	40 CFR 63.3350(e)(5)
each APCD **AND** its monitoring equipment	**RECORD:** each instance of required maintenance	40 CFR 63.10(b)(2)(iii)

III. J. Recordkeeping Requirements for Web Coating Lines. Meet the following requirements, as applicable.

Applies to:	a. Meet the following requirement	Citation
each APCD **AND** its monitoring equipment	**RECORD:** each occurrence and duration of each malfunction	40 CFR 63.10(b)(2)(ii)
each continuous monitoring system (CMS)	**RECORD:** • each calibration check • each adjustment and maintenance	40 CFR 63.10(b)(2)(x)
each CMS	**RECORD:** the date and time of each instance of: • CMS inoperative, **EXCEPT:** zero (low-level) and high-level checks • CMS out-of-control [as defined at 40 CFR 63. 63.8(c)(7)]	40 CFR 63.10(c)(5)
each CMS malfunction	**RECORD:** • the nature and cause (if known) • corrective action taken or preventive measures adopted • the nature of repairs or adjustments	40 CFR 63.10(c)(10)
each web coating line connected to an APCD	**RECORD:** each occurrence and duration of each startup, shutdown, or malfunction	40 CFR 63.10(b)(2)(i)
each CMS	**RECORD:** the date and time of each instance of excess emissions and parameter monitoring exceedances during: • startups, shutdowns, and malfunctions • all other periods	40 CFR 63.10(c)(7)
each web coating line with a CMS	**RECORD:** total process operating time during the reporting period	40 CFR 63.10(c)(13)
each occurrence of a startup, shutdown, **OR** malfunction	**RECORD:** as needed • to demonstrate that the response was consistent with the startup, shutdown, and malfunction (SSM) Plan, **OR** • why the response was **NOT** consistent with the SSM Plan	40 CFR 63.6(e)(3)(iii)

III. J. Recordkeeping Requirements for Web Coating Lines. Meet the following requirements, as applicable.

Applies to:	a. Meet the following requirement	Citation
IF: a startup, shutdown, **OR** malfunction occurs, **AND:** the SSM Plan inadequately addresses the event	**REVISE:** Startup, Shutdown, Malfunction (SSM) Plan **DUE:** within 45 day after the event **IF:** revision of the SSM Plan "*alters the scope of the activities at the source which are deemed to be a startup, shutdown, malfunction, or otherwise modifies the applicability of any emission limit, work practice requirement, or other requirement in a standard* " **THEN SUBMIT:** a notification describing changes to permitting authority	40 CFR 63.6(e)(3)(viii)
each workstation of each web coating line	**DETERMINE**: OHAP mass fraction of each coating material "as-purchased" **AND** "as-applied" **HOW**: according to the methods at 40 CFR 63.3360(c)(1)-(4)	40 CFR 63.3360(c)
one or more workstations of one or more web coating lines, **IF ELECT:** VOC content as a surrogate for organic HAP	**DETERMINE**: for each coating material applied, "as-purchased" **AND** "as-applied" • VOC content **[HOW:** Method 24, OR formulation data], **AND** • coating solids content [**HOW**: Equation. 1b **AND** 2 of 40 CFR 63.3370]	40 CFR 63.3360(d)

III. J. Monitoring Requirements for Web Coating Lines. Meet the following requirements, as applicable.

Applies to:	a. Meet the following requirement	Citation
each oxidizer, **EXCEPT:** catalytic oxidizers	**MONITOR:** temperature, in the combustion zone **HOW:** by continuous parameter monitoring system (CPMS) = temperature sensor located in the combust. zone, **AND** a continuous recorder **ACCURACY:** greater of: ±1% of true temperature (^{o}C) being monitored, **OR** ±1^{o} C	40 CFR 63.3350(e)(9)(ii)
each catalytic oxidizer	**MONITOR:** ΔT across the catalyst bed **HOW:** by CPMS = temperature sensor at inlet and outlet of the catalyst bed, **AND** continuous recorder **ACCURACY:** greater of: ±1% of true temperature (^{o}C) being monitored, **OR** ±1^{o} C	40 CFR 63.3350(e)(9)(iii)
each oxidizer	**INSTALL, CALIBRATE, MAINTAIN, AND OPERATE:** the CPMS according to the manufacturer's specs.	40 CFR 63.3350(e)(9)(i)
each oxidizer	**VERIFY:** the calibration of the chart recorder, data logger, **AND** temperature indicator, **OR IF**: equipment cannot be calibrated, **THEN**: replace **WHEN:** once every 3 months	40 CFR 63.3350(e)(9)(i)

III. J. Monitoring Requirements for Web Coating Lines. Meet the following requirements, as applicable.

Applies to:	a. Meet the following requirement	Citation
capture system	**MONITOR:** capture system operating parameter **WHEN:** continuously, when any associated web coating line is operated **HOW:** according to the *Capture System Site-Specific Monitoring Plan*	40 CFR 63.3350(f)(3)
each CPMS used by each: • APCD • capture system	**CPMS Data Collection** **FREQUENCY:** ≥1 cycle of CPMS operation for each successive 15-min period **FULFILLMENT:** collect valid data for ≥ 90% of the hours of process operation [where: a valid hour of data ≥ 4 equally spaced successive CPMS cycles]	40 CFR 63.3350(e)(1)
each CPMS used by each: • APCD • capture system	**CPMS Data Reduction** **DETERMINE**: each hour: • hourly avg. of all CPMS recorded values, **AND** • rolling 3-hr average of all recorded readings for each operating period **HOW**: according to 40 CFR 63.3350(e)(3) and (4), and (e)(7) [for data to exclude]	40 CFR 63.3350(e)(3)
each CPMS used by each: • APCD • capture system • bypass control	**MAINTAIN:** parts for routine repair	40 CFR 63.3350(e)(6)
each CPMS used by each: • APCD • capture system • bypass control	**WHEN TO MONITOR:** at all times that the unit is operating, **EXCEPT**: during: • CPMS malfunction, **OR** • repair, **OR** • QA/QC (including calibration checks, zero and span adjust)	40 CFR 63.3350(e)(7)

III. J. Reporting and Notification Requirements for Web Coating Lines. Meet the following requirements, as applicable.

Applies to:	a. Meet the following requirement	Citation

III. J. Reporting and Notification Requirements for Web Coating Lines. Meet the following requirements, as applicable.

Applies to:	a. Meet the following requirement	Citation
the collection of web coating lines [the MACT JJJJ affected source]	**SUBMIT:** Initial Notification **DUE:** 12/5/2004 **CONTENT:** according to 40 CFR 63.9(b)(2)(i)-(v) **OR, MAY ELECT:** substitute Title V application **IF** ... [see 40 CFR 63.3400(b)(3)-(4)]	40 CFR 63.3400(b)
the collection of web coating lines [the MACT JJJJ affected source]	**SUBMIT:** initial Semi-annual Compliance Report **DUE:** 1/31/2006 [for the reporting period: 12/5/2005 to 12/31/2005] **OR, MAY ELECT:** submit with the closest semi-annual Title V Periodic Monitoring Report **CONTENT:** according to 40 CFR 63.3400(c)(2)	40 CFR 63.3400(c)
the collection of web coating lines [the MACT JJJJ affected source]	**SUBMIT:** Semi-annual Compliance Report **DUE:** 7/31/x [for the reporting period: 1/1 to 6/30/x], **AND** 1/31/(x+1) [for 7/1 to 12/31/x] **OR, MAY ELECT:** submit with the closest semi-annual Title V Periodic Monitoring Report **CONTENT:** according to 40 CFR 63.3400(c)(2)	40 CFR 63.3400(c)
the collection of web coating lines [the MACT JJJJ affected source], **IF ELECTED**	**MAY ELECT:** with WI DNR approval, to adjust the due date of MACT JJJJ submittals, including: • to be consistent with due dates under submittals of a Title V permit • to arrive at a single due date if the facility is subject to multiple MACTs, NSPSs, NESHAPs **HOW**: according to 40 CFR 63.9(i), 10(a)(5), 10(a)(6), 10(a)(7)	40 CFR 63.9(i)
any substantive change in any information previously submitted to WI DNR	**SUBMIT:** changes within 15 days after the change	40 CFR 63.9(j)
each performance test	**SUBMIT:** Notification of Compliance Status **DUE:** within 60 days of completing the test **CONTENT:** according to 40 CFR 63.9(h)(2)(i)	40 CFR 63.3400(e)

III. J. Reporting and Notification Requirements for Web Coating Lines. Meet the following requirements, as applicable.

Applies to:	a. Meet the following requirement	Citation
each occurrence of a startup, shutdown, **OR** malfunction, **IF:** the response is **NOT** consistent with the SSM Plan, **AND IF:** an emission standard is exceeded	**RECORD:** actions for that event **NOTIFY:** by telephone or fax: within 2 working days after commencing the actions that were inconsistent with the SSM Plan **REPORT:** by letter, within 7 working days of the end of event **CONTENT:** according to 40 CFR 63.10(d)(5)(ii)	40 CFR 63.6(e)(3)(iv)
use an air pollution control device (APCD)	**SUBMIT:** Start-up, Shutdown, Malfunction (SSM) Report **HOW:** per 40 CFR 63.10(d)(5) **CONTENT:** according to 40 CFR 63.10(d)(5)	40 CFR 63.3400(g)
a startup, shutdown, or malfunction occurs, **AND:** the facility response is consistent with the SSM Plan	**SUBMIT:** SSM Report **DUE:** 1/30/x [reporting period = 6/1/(x-1) to 12/31/(x-1)] AND 7/30/x [reporting period = 1/1/x to 7/31/x] **CONTENT**: according to 40 CFR 63.10(d)(5)(i)	40 CFR 63.10(d)(5)(i)

III. J. Performance Testing Requirements for Web Coating Lines. The permittee shall conduct an initial performance test of each air pollution control device and capture system used to meet the emission standards of 40 CFR 63 sub JJJJ, as follows and as applicable.

Applies to:	a. Meet the following requirement	Citation
each thermal oxidizer **AND** catalytic oxidizer	**CONDUCT:** Performance Test, including establish destruction or removal efficiency of the APCD **DUE:** within 180 days after start-up of the APCD **HOW:** according to the test methods, data reduction requirements, etc. of 40 CFR 63.3360(e)(1)(i)-(x) and (e)(2), 40 CFR 63.63.7(e)(1)-(4)	40 CFR 63.3360(e)(1)
each thermal oxidizer	**ESTABLISH:** operating parameter = T(average) at firebox or immediately downstream **WHEN:** during the initial performance test **HOW**: according to §63.3360(e)(3)(i)	40 CFR 63.3360(e)(3)(i)

III. J. Performance Testing Requirements for Web Coating Lines. The permittee shall conduct an initial performance test of each air pollution control device and capture system used to meet the emission standards of 40 CFR 63 sub JJJJ, as follows and as applicable.

Applies to:	a. Meet the following requirement	Citation
each catalytic oxidizer	**ESTABLISH:** operating parameter ... **MAY ELECT**: either: • T(average) just before the catalyst bed, **AND** ΔT(average) across the bed, **OR** • T(average) just before the catalyst bed, **AND** a site-specific inspection/maintenance plan [**CONTENT:** according to 40 CFR 63.3360(e)(3)(ii)(E)(1) - (3)] **WHEN:** during initial performance test **HOW**: according to 40 CFR 63.3360(e)(3)(ii)	40 CFR 63.3360(e)(3)(ii)
each PTE (permanent total enclosure) capture system	**DEMONSTRATE:** compliance with the criteria of Method 204 in Section 6 of 40 CFR 51, Appendix M	40 CFR 63.3360(f)(1)
each capture system which is **NOT** a PTE	**DETERMINE**: capture efficiency **HOW**: • Method 204 and 204A-F [40 CFR 51 Appendix M], **OR** • other methods, as provided at 40 CFR 63.3360(f)(2), **OR** • other methods, as approved by WI DNR	40 CFR 63.3360(f)(2)
each performance test	**DEVELOP:** a written, site-specific Test Plan **SUBMIT:** submit to WI DNR only if requested **CONTENT:** according to 40 CFR 63.7(c)(2)	40 CFR 63.7(c)(2)(i)
each performance test	**SUBMIT:** Notification of Performance Test **DUE:** 60 days prior to test **CONTENT:** according to 40 CFR 63.3400(d) [includes identification of the operating parameters of the capture system and APCD]	40 CFR 63.3400(d)
IF: a scheduled performance test cannot be performed	**RESCHEDULE:** according to 40 CFR 63.7(b)(2)	40 CFR 63.7(b)(2)
each performance test	**REQUEST:** performance audit (PA) samples from the EPA Regional Office **OR** from the responsible enforcement authority **DUE:** 30 days prior to the test **ANALYZE:** PA samples during the performance test, **UNLESS:** EPA/enforcement authority fails to provide the samples on time	40 CFR 63.7(c)(4)(i)

III. J. Performance Testing Requirements for Web Coating Lines. The permittee shall conduct an initial performance test of each air pollution control device and capture system used to meet the emission standards of 40 CFR 63 sub JJJJ, as follows and as applicable.

Applies to:	a. Meet the following requirement	Citation
each performance test	**SUBMIT:** Performance test Report **CONTENT:** according to 40 CFR 63.10(d)(2) **DUE:** submit with the Notification of Compliance Status	40 CFR 63.3400(f)

III. J. Requirements for Written Plans and General Operating Requirements for Web Coating Lines. Meet the following requirements, as applicable

Applies to:	a. Meet the following requirement	Citation
APPLIES IF: use an air pollution control device (APCD)	**DEVELOP, IMPLEMENT:** Startup, Shutdown, and Malfunction Plan **DUE:** 12/5/2005 [MACT JJJJ compliance date] **RETENTION:** each superseded version for 5 years **CONTENT:** according to 40 CFR 63.10(d)(5)	40 CFR 63.6(e)(3)
each capture system of each APCD	**DEVELOP:** Capture System Site-Specific Monitoring Plan **CONTENT**: specify/identify: • operation parameter and rationale • value or range needed to meet emissions standards • corresponding specific monitoring procedures **REVIEW:** annually	40 CFR 63.3350(f)
each PTE (permanent total enclosure) capture system	**MEET:** Method 204, Sect. 6 [40 CFR 51, Appendix M], **AND** **ROUTE:** all exhaust gases from the enclosure to an APCD	40 CFR 63.3360(f)(1)

III. K. CONDITIONS THAT APPLY TO ALL PROJECT/FACITLITY CHANGES UNDER PART III.A.

Pollutant	a. Emission Limitations	b. Compliance Demonstration	c. Reference Test Methods, Recordkeeping and Monitoring Requirements
1. Criteria Pollutants: Carbon Monoxide, Oxides of Nitrogen, Particulate Matter, Sulfur Dioxide, Volatile Organic Compounds, Lead, or Lead Compounds	(1) The emissions for each criteria pollutant shall be limited to less than 100 tons per year for each process/facility change under Part III.A.[30] [s. 285.65(7), Wis. Stats.]	(1) Emission factor data, information from Material Safety Data Sheets (MSDS), or any other information necessary shall be used to calculate criteria pollutant emissions. [s. NR 407.09(4)(a)1., Wis. Adm. Code] (2) For each project/facility change which is made under authorization of Part III, Section A of this permit, the permittee shall perform a monthly calculation for each criteria pollutant, as identified below, which could reasonably exceed the 100 tpy criteria in III.K.1.a.(1). Procedures for performing these calculations, as applicable, are listed as follows: (a) **Spray/Paint Booth Coating** [authorized under Part III.A.(1) of this permit] • Volatile Organic Compounds: calculated each month according to the procedure stated in I.H.3.b.(3). and sum the monthly emissions to provide emissions on an annual basis in tons per year. • Particulate Matter: calculate each month by multiplying material throughput, or other suitable characteristic of the activity, by an appropriate emissions factor from AP-42 or as derived from engineering calculations and sum the monthly emissions to provide emissions on an annual basis in tons per year. Alternatively, the permittee may assume that monthly emissions are less than or equal to the emission limit in I.H.1.a.(1). (b) **Ceramic Fiber Making**. [authorized under Condition (2) of Part III, Section A of this permit] • Volatile Organic Compounds: calculate each month according to the procedure stated in I.I.2.b.(1) and sum the monthly emissions to provide emissions on an annual	(1) The following monthly records shall be compiled by the 15th day after the end of the month: (a) emission factor data, information from Material Safety Data Sheets (MSDS), or any other information used to calculate emissions and (b) the calculation of each criteria pollutant emitted from each process/facility change under Part III.A. in tons per year. [ss. NR 439.04 and NR 407.09(4)(a)1., Wis. Adm. Code]

[30] The 100 tons per year limit or carbon monoxide, oxides of nitrogen, particulate matter, sulfur dioxide, volatile organic compounds, lead, or lead compounds, was established to avoid doing an environmental assessment under section NR 150.03(8)(b)1, Wis. Adm. Code.

III. K. CONDITIONS THAT APPLY TO ALL PROJECT/FACITLITY CHANGES UNDER PART III.A.

Pollutant	a. Emission Limitations	b. Compliance Demonstration	c. Reference Test Methods, Recordkeeping and Monitoring Requirements
1. Criteria Pollutants: Carbon Monoxide, Oxides of Nitrogen, Particulate Matter, Sulfur Dioxide, Volatile Organic Compounds, Lead, or Lead Compounds (continued)		basis in tons per year. (c) **Chromium Plating**. [authorized under Condition (3) of Part III, Section A of this permit] No monthly calculations-no criteria pollutant emissions could reasonably exceed 100 tons per year. • Volatile Organic Compounds: calculate each month according to III.H.4.b.(1) and (2) and sum the monthly emissions to provide emissions on an annual basis in tons per year. (d) **R&D/Pilot/Development Projects**. [authorized under Condition (4) of Part III, Section A of this permit] • Volatile Organic Compounds: calculate each month according to the procedure stated in III.I.1.b. and sum the monthly emissions to provide emissions on an annual basis in tons per year. • Particulate Matter (PM): calculate each month by multiplying material throughput, or other suitable characteristic of the activity, by an appropriate emissions factor from AP-42 or as derived from engineering calculations and sum the monthly emissions to provide emissions on an annual basis in tons per year. Alternatively, the permittee may assume that monthly emissions are less than or equal to the emission limit on particulate matter as stated in III.I.2.a.(1). (e) **Web Coating**. [authorized under Condition (5) of Part III, Section A of this permit] • Volatile Organic Compounds: calculate each month by multiplying the VOC content (%) of each coating used in the month by the mass of the coating used, consistent with applicable equations that are referenced in III.J.1.b. and sum the monthly emissions to provide emissions on an annual basis in tons per year. [NOTE: Criteria pollutants which are listed above for	

III. K. CONDITIONS THAT APPLY TO ALL PROJECT/FACITLITY CHANGES UNDER PART III.A.

Pollutant	a. Emission Limitations	b. Compliance Demonstration	c. Reference Test Methods, Recordkeeping and Monitoring Requirements
1. Criteria Pollutants: Carbon Monoxide, Oxides of Nitrogen, Particulate Matter, Sulfur Dioxide, Volatile Organic Compounds, Lead, or Lead Compounds (continued)		each project are those which could reasonably exceed the criteria of 100 tpy. Assurance that none of the other criteria pollutants for that project will exceed 100 tpy is provided by the underlying nature of the project or facility change. There are either no emissions of these other criteria pollutants, or the emissions are nominal in comparison with the 100 tpy limit. [accordingly, no emission limits for these substances have been established for the existing, similar plant operations at Part I] [s. NR 407.09(4)(a)1., Wis. Adm. Code]	

Appendix A

3M Menomonie: Streamlining Analysis of Coating Rules

Note: terms defined below are highlighted in *blue italic* font

	MACT JJJJ Paper and Other Web Coating	**NSPS RR** Pressure Sensitive Tape And Label Surface Ctg.	**WI: NR 424** Control of Org. Compound Emissions from Process Lines	**WI: NR 422** Control of Org. Compound Emissions from Surface Coating, Printing, and Asphalt Surfacing Operations.
Applies to:	CAA §112 major sources of HAP emissions with 1 or more ***web coating line*** [*Cit.* §63.3320]	Each ***coating line*** to manufacture ***pressure sensitive tape and label materials***; **AND** which commences construction, modification, or reconstruction after 12/30/80 [*Cit.* §60.440(a)]	All ***process lines*** which are direct air contaminant sources, **AND** modification commenced on or after August 1, 1979, **AND** which are not subject to emission limitations listed elsewhere in chs. NR 419 to 423 [*NR 424.01(1)*]	Roll, knife, or rotogravure coater(s) and drying ovens of fabric and vinyl coating lines [*Cit.* §335-3-6-.3(7)(b)]
How the rule applies:	[Affected Source] the collection of all web coating lines, including web coating lines for • coating metal webs used in flexible packaging • coating fabric substrates for use in pressure ***sensitive tape*** and abrasive materials **[1]** [*Cit.* §63.3310]	[Affected Facility] Each qualifying coating line [*Cit.* §60.440(a)]		Each qualifying coater/drying oven combination

Notes:

[1]	An Affected Source is a: • *New affected source*, **IF:** construction or reconstruction commenced after 9/13/2000 *Existing affected source*, **IF:** construction or reconstruction commenced on or before 9/13/2000, and has not undergone reconstruction as defined in 40 CFR 63.2

Streamlining: Coating Rules (cont'd)

3M Menomonie: Streamlining Analysis of Coating Rules

	MACT JJJJ Paper and Other Web Coating	**NSPS RR** Pressure Sensitive Tape, etc.	**WI: NR 424** VOCs from Process Lines, etc.	**WI: NR 422** VOCs from Surface Coat., etc.

	MACT JJJJ Paper and Other Web Coating	**NSPS RR** Pressure Sensitive Tape, etc.	**WI: NR 424** VOCs from Process Lines, etc.	**WI: NR 422** VOCs from Surface Coat., etc.
Exempt	**Exempt From the Rule** Web coating lines defined as research or laboratory equipment **IF:** the owner elects to include in the MACT KK [Printing & Publishing] affected source: • stand-alone ctg. equipment subject to MACT KK, **AND/OR** • product and packaging rotogravure or wide-web flexographic press subject to MACT KK Lithography, screenprinting, letterpress, and narrow-web flexographic printing processes Web coating lines subject to MACT EE Web coating lines subject to future MACTs for: • surface coating of *metal coil* • printing, coating, and dyeing of *fabric* and other textiles, including: any web ctg. line that coats both a paper or other web substrate and a fabric or other textile substrate, **EXCEPT:** a fabric substrate used for *pressure sensitive tape* and abrasive materials [*Cit*. §63.3330]	**Exempt From the Rule:** NA **Exempt From Most Requirements** **IF:** an affected facility with VOC input to the coating process ≤ 45 Mg (49.6 tons) per 12 mo period **THEN:** exempt from emission standards at §60.442(b) [and effectively exempt from most of the rest of the rule] [*Cit*. §60.440(b)]	**Exempt From the Rule:** NA	**Exempt From the Rule:** NA

Streamlining: Coating Rules (cont'd)

	MACT JJJJ Paper and Other Web Coating	**NSPS RR** Pressure Sensitive Tape, etc.	**WI: NR 424** VOCs from Process Lines, etc.	**WI: NR 422** VOCs from Surface Coat., etc.
Standards:	Organic HAP emissions from Existing Affected Sources [New Affected Sources], not to exceed: • 5% [≤ 2%] of org-HAP applied, each mo, **OR** • 4% [≤1.6%] of mass of ctg. materials applied, for each mo., **OR** • 20% [≤ 8%] mass of ctg. solids applied, for each mo., **OR** • **IF:** controlled by an oxidizer, **THEN:** outlet org-HAP ≤ 20 ppmv by compound, dry basis, **AND** capture efficiency = 100% [*Cit*. §63.3320(b)] **OR:** calculated equivalent allowable organic HAP emission rate [*Cit*. §63.3320(b)]	VOC emissions, from each Affected Facility, not to exceed: • 0.20 kg VOC/kg of ctg solids applied, weighted avg., each calendar month; **OR** • 90% overall VOC control, calculated over a calendar month; **OR** • % overall VOC emission reduction per §60.443(b), calculated over a calendar month [*Cit*. §60.442(a)]	**CONTROL:** VOC emissions by at least 85% [(2)(b)] **IF:** 85% control has been demonstrated to be technologically infeasible for a specific process line, **THEN:** use the latest available control techniques and operating practices demonstrating best current technology, as approved by the department [(2)(c)] **IF:** a surface coating **OR** printing process, **THEN:** may elect to meet all of the following: • the emission limitations of ss. NR 422.01 to 422.155, notwithstanding ss. NR 422.03 (1), (2), (3), (4) or (4m) and 425.03, **AND** • meets the relevant applicability requirements of ss. NR 422.05 to 422.155, **AND** • submit a written request to the department [*Cit*.	VOC emissions, from each fabric coater, not to exceed: 0.35 kg VOC/L ctg, (2.9 lb/gal), excluding water, delivered to the ctg. applicator VOC emissions, from each vinyl coater, not to exceed: 0.45 kg/L ctg. (3.8 lb/gal), excluding water, delivered to the ctg. applicator [*Cit*. §335-3-6-.3(7)(c)]

Streamlining: Coating Rules (cont'd)

	MACT JJJJ Paper and Other Web Coating	**NSPS RR** Pressure Sensitive Tape, etc.	**WI: NR 424** VOCs from Process Lines, etc.	**WI: NR 422** VOCs from Surface Coat., etc.
Key Definitions	**Web coating line** = any number of *work stations*, of which one or more *applies* a continuous layer of *coating material* across the entire width or any portion of the width of a *web* substrate, and any associated curing/drying equipment between an *unwind or feed station* and a *rewind or cutting station*. **Fabric** = any woven, knitted, plaited, braided, felted, or non-woven material made of filaments, fibers, or yarns including thread. This term includes material made of fiberglass, natural fibers, synthetic fibers, or composite materials. **Metal coil** = a continuous metal strip that is at least 0.15 millimeter (0.006 inch) thick which is packaged in a roll or coil prior to coating. After coating, it may or may not be rewound into a roll or coil. Metal coil does not include metal webs that are coated for use in flexible packaging. **Pressure sensitive tape** = a flexible backing material with a pressure-sensitive adhesive coating on one or both sides of the backing. Examples include, but are not limited to, duct/duct insulation tape and medical tape. **Research or laboratory equipment** = any equipment for which the primary purpose is to conduct research and development into new processes and products where such equipment is operated under the close supervision of technically trained personnel and is not engaged in the manufacture of products for commercial sale in commerce except in a de minimis manner. **Flexible packaging** = any package or part of a package the shape of which can be readily changed. Flexible packaging includes, but is not limited to, bags, pouches, labels, linersand wraps utilizing paper, plastic, film, aluminum foil, metalized or coated paper or film, or any combination of these materials. **Applied** = for the purposes of this subpart, the amount of organic HAP, coating material, or coating solids (as appropriate for the emission standards in Sec. 63.3320(b)) used by the affected source during the compliance period. **Coating material(s)** = all inks, varnishes, adhesives, primers, solvents, reducers, and other coating materials applied to a substrate via a web coating line. Materials used to form a substrate are not considered coating materials.	**Coating line** = any number or combination of adhesive, release, or precoat coating applicators, flashoff areas, and ovens which coat a continuous web, located between a web unwind station and a web rewind station, to produce pressure sensitive tape and label materials. **Coating applicator** = an apparatus used to apply a surface coating to a continuous web. **Flashoff area** = the portion of a coating line after the coating applicator and usually before the oven entrance. **Hood or enclosure** = any device used to capture fugitive volatile organic compounds. **Oven** = a chamber which uses heat or irradiation to bake, cure, polymerize, or dry a surface coating. **Precoat** = a coating operation in which a coating other than an adhesive or release is applied to a surface during the production of a pressure sensitive tape or label product.	**"Process line"** means one or more actions or unit operations which must function simultaneously or in sequence in order to manufacture or modify a product. [Cit. 335 3 6 .3(6)(a)]	**Fabric Coating** = the coating of a textile substrate with a knife, roll, or rotogravure coater to impart properties that are not initially present, such as strength, stability, water or acid repellancy, or appearance. **Knife Coating** = the application of a coating material to a substrate by means of drawing the substrate beneath a knife that spreads the coating evenly over the full width of the substrate. **Roll Coating** = the application of a coating material to a substrate by means of hard rubber or steel rolls. **Rotogravure Coating** = the application of a coating material to a substrate by means of a roll coating technique in which the pattern to be applied is etched on the coating roll. The coating material is picked up in these recessed areas and is transferred to the substrate. 5. "Vinyl Coating" shall mean to apply a decorative or protective topcoat or printing on vinyl coated fabric or vinyl sheets. **335 3 6 .3(7)(a)**

Streamlining: Coating Rules (cont'd)

	MACT JJJJ Paper and Other Web Coating	**NSPS RR** Pressure Sensitive Tape, etc.	**WI: NR 424** VOCs from Process Lines, etc.	**WI: NR 422** VOCs from Surface Coat., etc.
	Rewind or cutting station = a unit from which substrate is collected at the outlet of a web coating line. **Unwind or feed station** = a unit from which substrate is fed to a web coating line. **Web** = a continuous substrate (e.g., paper, film, foil) which is flexible enough to be wound or unwound as rolls. **Work station** = a unit on a web coating line where coating material is deposited onto a web substrate. [Source: 63.3310]			